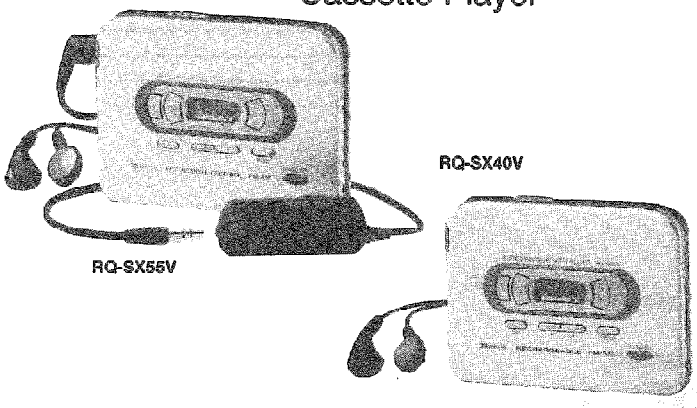
ORDER NO. AD9804076C3

Service Manual

Mini Cassette

DOLBY B NR* Stereo Radio Cassette Player

RQ-SX40V
RQ-SX55V



Colour

(A) .....Blue Type
(S) .....Silver Type

Areas

GCS .....Singapore
GK.....China
GH.....Hong Kong

Areas and Colors for Every Models

RQ-SX40V (GCS, GK, GH).....(S)
RQ-SX55V (GCS, GK, GH).....(A, S)

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AR10 Mechanism Series

Specifications

General:

Power Requirement:
Battery; DC 1.5 V one "R6/LR6, AA, UM-3" size battery (not included)
(Panasonic R6, LR6 or equivalent not included)
Rechargeable Battery; DC 1.2 V with an included Panasonic Rechargeable Battery (RP-BP61GY-S)x1
Power Output:
4 mW+4 mW (RMS...max.)
Output Jack:
Headphones; 30 ohm
Dimensions: 109.6 (Wide) / 80.2 (High) / 21.9 (Depth) mm
Weight: 178 g (with rechargeable battery)
Charger: (RP-BC155AEY) (included)
Input; (For China and Hong Kong)
AC 220 V, 50 Hz, 4 VA
(For Others)
AC 120-240 V, 50 Hz, 4 VA
Output; DC 340 mA, 1.2 V
Playing time:
(When used in hold mode, at 25 °C on a flat and stable surface.)
The play time may be shorter depending on the operating conditions.

Function / Battery type	Tape	Radio
Rechargeable (A)	15	14
Panasonic alkaline	51	47
Both together (A)	65	60

Radio:

Frequency Range:

AM mode	AM (kHz)	FM (MHz)
9 kHz mode	522-1629	87.50-108.00
10 kHz mode	520-1630	87.50-108.00

(0.1MHz steps)
TV; 1-12 ch (Japan mode only)
Intermediate Frequency: AM; 450 kHz, FM; 10.6 MHz
Sensitivity: AM; 316.2 µV/m/0.5mW output (Max)
FM; 2.5 µV/0.5 mW (-3 dB Limit sense)

Cassette Player:

Frequency Range (Normal/High/Metal): 40~18,000 Hz
Track System: 4-track 2-channel stereo playback

Note: Design and specifications are subject to change without notice.
Weight and dimensions are approximate.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Contents

	Page
Accessories	2
Power Sources	2
Memory Presetting	3
Listening to The Radio	3
Maintenance	4
Cautions	4
Hold Function	4
Playing a Tape	4, 5
Changing the Tone	4, 5
Service Mode	6~9
Mechanism Block Replacement Procedure	10
Operation Checks and Main Component Replacement Procedures	11~15
Mesurements and Adjustments	16, 17
Block Diagram	18
Type Illustration of IC's, Transistors and Diodes	18
Schematic Diagram	19~24
Printed Circuit Board and Wiring Connection Diagram	25, 26
Terminal Guide	27, 28
Mechanism Parts Location	28
Cabinet Parts Location	29
Replacement Parts List	30~32
Packaging	33

Accessories

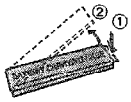
Stereo earphones .....1 pc.
- RQ-SX40V (RFEV317P-KS)
- RQ-SX55V (RFEV316P-KIS)

Remote controller .....1 pc.
- RQ-SX55V only (RFEV013P-KS)

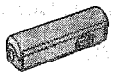
Charger.....1 pc.
(RP-BC155AEYB) .... (GCS)
(RP-BC155AGK) ..... (GK)
(RP-BC155AGH) ..... (GH)

Rechargeable battery .....1 pc.
(RP-BG61GY-S)

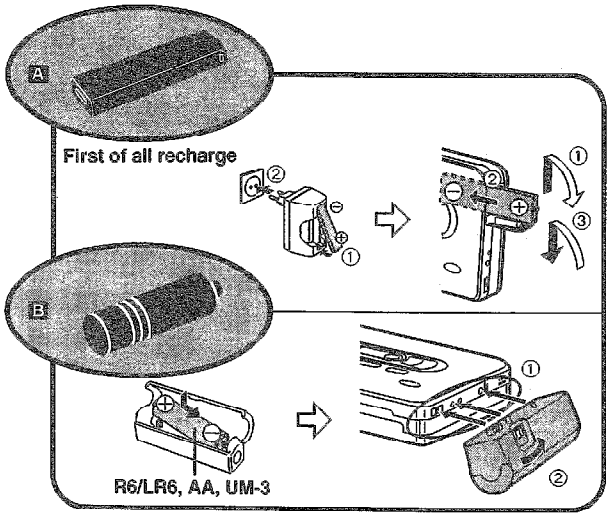
Rechargeable battery carrying case....1 pc.
(RFA0475-Q)

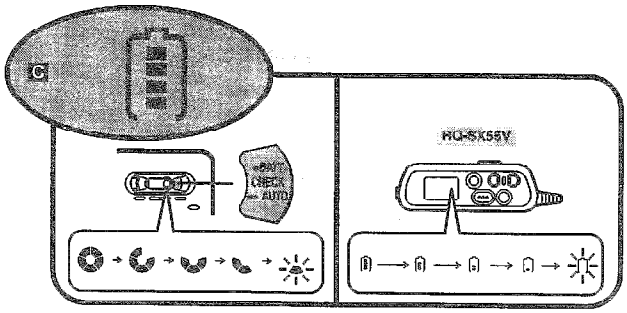


Dry cell battery case.....1 pc.
(RFA0617-H)



Power Sources





A Rechargeable battery
- Use only the included charger when recharging.
- The chart shows expected use after 2 hours (11 hours at 120 V) of recharging at 25°C.

Tape playback	About 15 hours
Radio reception	About 14 hours

- The rechargeable battery can be recharged about 300 times. When its operation time becomes extremely shortened, that's time for replacing it.

B Dry cell battery

C Battery condition indicators

When the battery becomes weak

The indicators will flash.
Recharge the rechargeable battery or replace the dry cell battery with a new one.

- **To confirm the indicators on the main unit in the stop mode**
  Press •BATT CHECK.

To extend the playback time

Install both types of battery (rechargeable and dry cell battery) in the unit.

Memory Presetting

(Available only from the main unit)
Frequencies of up to 20 radio stations (10 each for AM and FM) can be stored in the memory.

Preparation
- Release hold.
- Connect the earphones (the cord of the earphones acts as an FM antenna) when storing frequencies of FM stations in the memory.

Auto memory function
The frequencies of each band are automatically stored in ascending order in the memory.
1. Press RADIO/BAND to switch on the power.
2. Press MODE to display "MEMO".
3. Press and hold ⇔ AUTO.
   The confirmation beep sounds as each frequency is stored.

When "error" appears on the display:
Correct presetting may not be possible in cases where the broadcast signals are too strong or too weak. In such cases, carry out presetting manually. (See below.)

Manual memory function
1. Press RADIO/BAND to switch on the power.
2. Press MODE to display "MEMO".
3. Press RADIO/BAND to select the band.
4. Press and hold MODE until the displayed frequency flashes.
5. Press + or − to select the broadcast frequency.
6. Press MODE so that "M" and the memory number flashes.
7. Press + or − to select the memory number to store the frequency.
8. Press MODE.

To erase an unnecessary station from the memory
1. Press RADIO/BAND to switch on the power.
2. Press MODE to display "MEMO".
3. Press RADIO/BAND to select the band.
4. Press + or − to select the memory number to be removed.
5. Press and hold MODE until the displayed frequency flashes.
6. Press and hold MODE until "M" and "----" flashes.
7. Press MODE.

Listening to the Radio

A

1. RQ-SX55V
   Connect the stereo earphones and the remote control.
   RQ-SX40V
   Connect the stereo earphones.
2. **Release hold.**
3. **Press RADIO/BAND (main unit) or press and hold the main button (remote control) to switch on the power.**
4. **Press MODE to display "MEMO" (MEMO mode) or not (free mode).**
   MEMO mode: To listen to a preset station
   Free mode: To listen to a desired station (not preset)
5. **Press RADIO/BAND (main unit) or the main button (remote control) to select the band.**
   Each press changes the indication between AM and FM.
6. **Press + or − to select the desired station.**
   Memory number (only on the main unit in MEMO mode) and broadcast frequency changes.
7. **Adjust the volume.**

To turn off the radio:
Press ■ OFF (main unit) or press and hold the main button (remote control).

To obtain better reception
When listening to AM broadcasts: B
As a built-in ferrite antenna is used, try various directions to obtain optimum reception.
When listening to FM broadcasts:
As the cord of the earphones acts as the FM antenna, extend it as far as possible rather than leaving it coiled.

To select stereo or monaural FM
When there is noise during FM reception: C
Press and hold SOUND SEL during reception to display "MONO".
The sound becomes monaural, but noise is reduced.

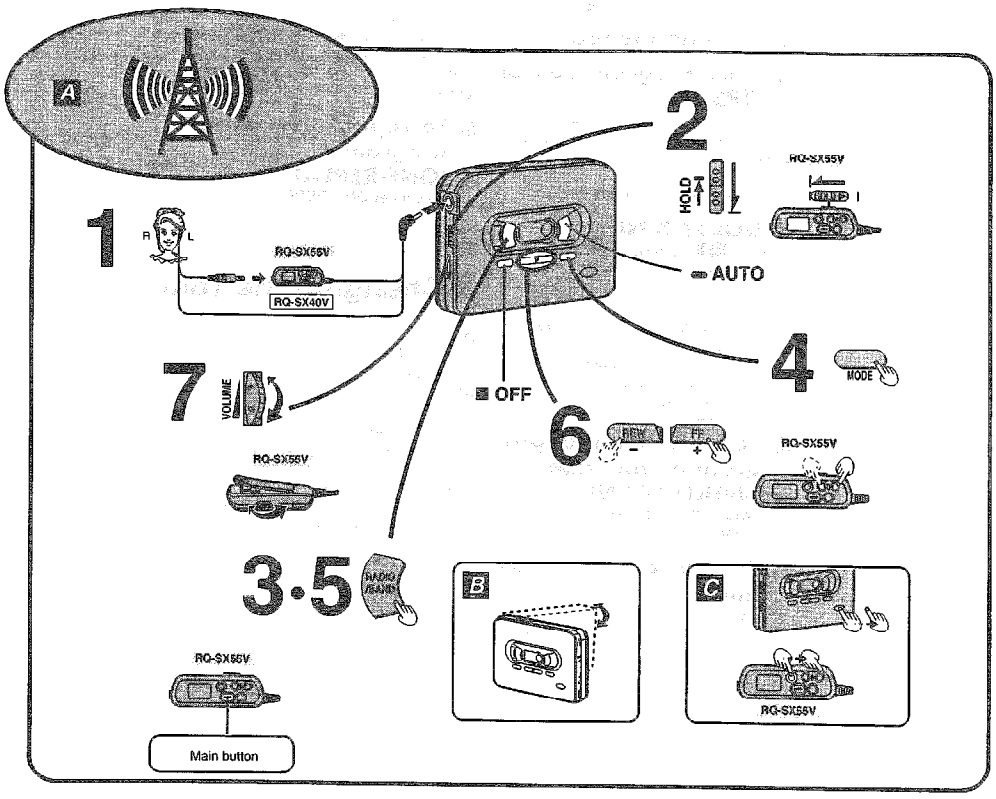
Automatic memory scan (for MEMO mode)
After selecting a band, press and hold + or − until the frequency display begins to change.
This function allows you to listen to each of the broadcast stations stored in the memory for about 5 seconds in order.
When a broadcast you like is being received:
Press + or − again.
To release the scan:
Press ⇔ AUTO on the main unit.

Automatic tuning (for free mode)
When selecting a broadcast frequency, press and hold + or − until the frequency display begins to change. It will automatically stop when a station is located.
To stop automatic tuning:
Press + or − again.

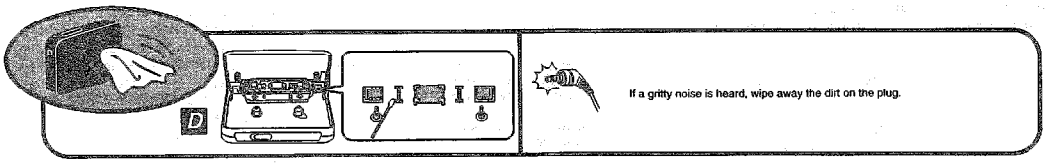
To convert the AM frequency step
(Available only from the main unit)
At the time of purchase, the AM band frequency changes in 9 kHz steps. These steps can be converted from 9 to 10 kHz to receive radio stations in a different country or area which cannot be tuned in 9 kHz steps.
- Converting the frequency step erases the stations previously stored in the memory.

1. Press RADIO/BAND to switch on the power.
2. Press RADIO/BAND for more than 5 seconds to display the step.
3. Press + or − to select the step.
   Each press changes the indication to "AM, 9" or "AM, 10".
   "AM, 9": 9 kHz step.
   For use in Southest Asia or Europe.
   "AM, 10": 10 kHz step.
   For use in North and South America or parts of Southeast Asia.
4. Press and hold MODE to confirm the AM broadcast frequency.

To return to the previous frequency step:
Follow the steps above.



Maintenance



Head care D
To ensure good sound quality, clean the head after approximately every 10 hours of use with a cotton swab dampened with a little alcohol.

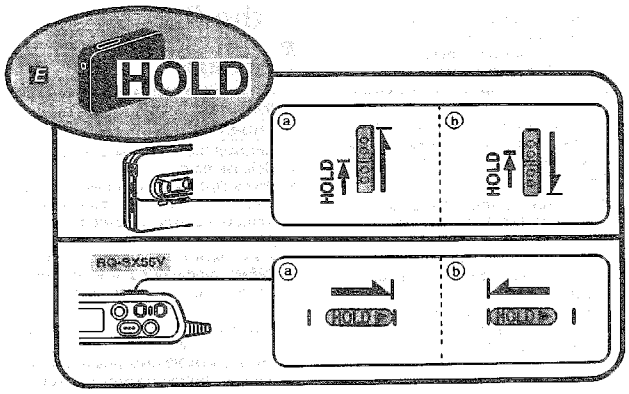
Main unit
Clean the cabinet with a cloth, dampened in mild solution of soap and water. Do not use benzine or thinner or aerosol type cleaner.

Cautions

- Insert the batteries in the correct polarities to avoid leakage and damage to this unit.
- Remove all the batteries if the set will not be used for a long period of time.
- Do not peel off the plastic covering on the rechargeable battery.
- To avoid product damage, do not expose this product to rain, water or other liquids.
- Avoid using or placing this unit near sources of heat. Do not leave it in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.

Hold Function

E
This function prevents the unit from operating in error.
ⓐ To hold
ⓑ To release (Before operation)
- The function on the main unit and the remote control are independent of each other.



Playing a Tape

F
This unit is equipped with an auto tape select function, so you can use normal, high or metal position tapes.

1. **Insert the cassette tape.**
   Tapeslack is wound automatically when the cover is closed and playback will be ready to start from the forward side.
   (a) Forward side
   (b) Reverse side
2. **Connect the stereo earphones and the remote control.**
3. **Release hold.**
4. **Press ◀ ▶ (main unit) or the main button (remote control).**
5. **Adjust the volume.**

- Do not play your headphones or earphones at high volume.
  (Before using the volume control on the remote control, be sure to adjust VOLUME on the main unit to the "5–7" position.)

To stop playback:
Press ■ OFF (main unit) or the main button (remote control).

■ Illuminated remote control
Pressing any button on the remote control or the unit lights the display for about 8 seconds (3 seconds when stopped): this enables easy use even in darkness.

Ⓐ **To confirm the display without operation**

G To change sides

H To wind the tape

I Tape Program Sensor (TPS)
You can skip as many programs as the number of times (up to 9) the button is pressed.

Ⓑ **To switch to playback**

J DOLBY B NR
Select "ON" to reduce noise on tapes recorded with Dolby B NR to ⅓.

> Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
> "DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

K To search for a program on the tape (INTRO-SCAN)
Ⓒ **When the desired program is found**

L To select the Play mode
BS: Blank skip function works.
↻: Both sides of the tape are played continuously.
⊃: Both the forward and reverse sides are played through once.

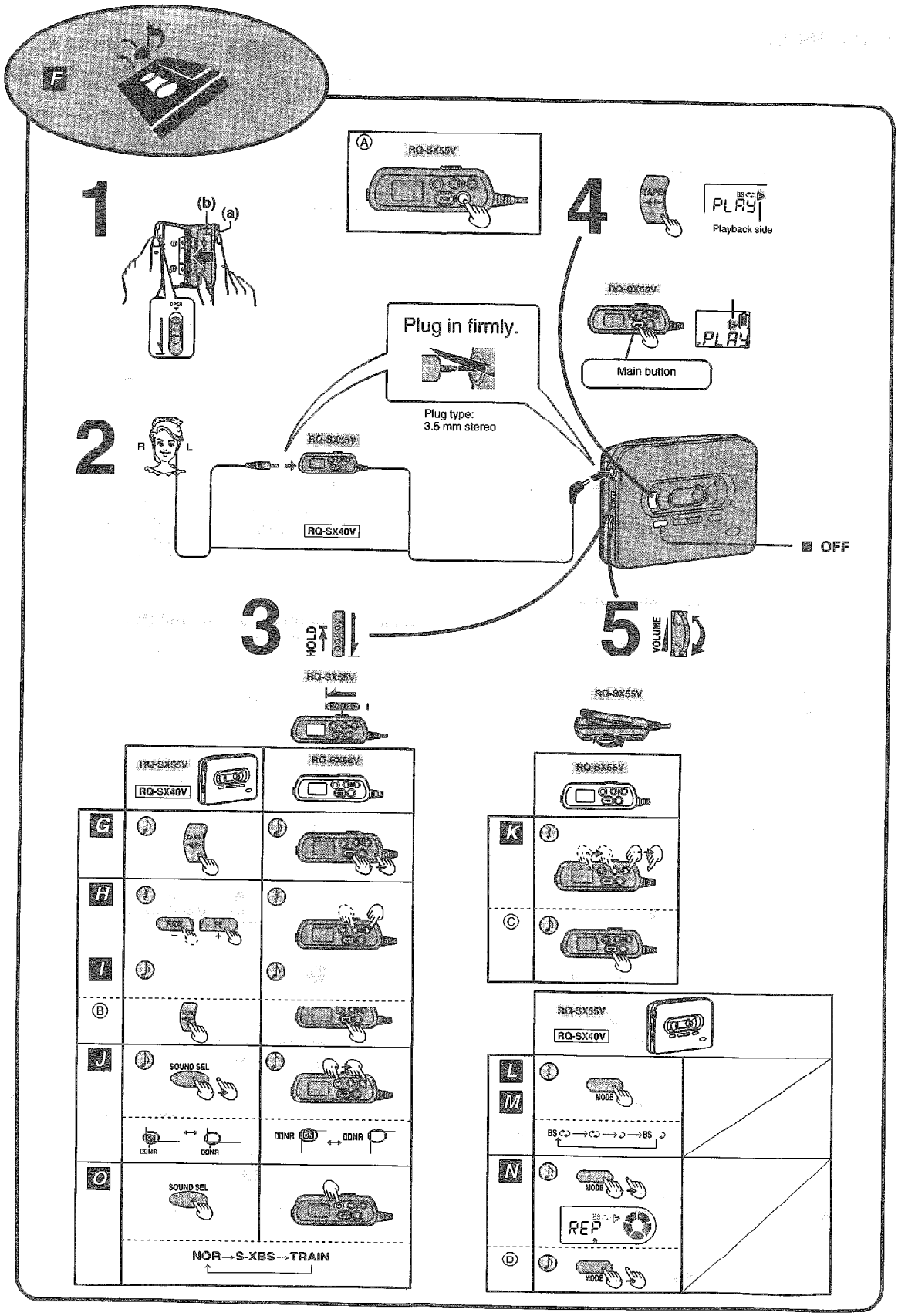
M Blank-Skip:
When a silent part of more than 13 seconds is detected during playback, the tape fast forwards until the next program is found. (If it is not found, play begins from the start of the opposite side.)

M To repeat the current program (ONE-REPEAT)
Ⓓ **To cancel ONE-REPEAT**

Changing the Tone

O
Works when playing a tape or listening to the radio.
NOR: Normal sound.
S-XBS: Boosts the low frequency range.
- If distortion occurs, turn down the volume.

TRAIN: Cuts down the audible level of sound which may disturb those around you.


F
1
(b)
(a)
OPEN
Ⓐ
RQ-SX55V
4
PLAY
Playback side
RQ-SX55V
PLAY
Main button
Plug in firmly.
Plug type:
3.5 mm stereo
2
R
L
RQ-SX55V
RQ-SX40V
OFF
3
HOLD
5
VOLUME
RQ-SX55V
RQ-SX40V
RQ-SX55V
G
H
I
Ⓑ
J
SOUND SEL
DDNR
O
SOUND SEL
NOR→S-XBS→TRAIN
RQ-SX55V
K
Ⓒ
RQ-SX55V
RQ-SX40V
L
M
MODE
BS
N
MODE
REP
Ⓓ
MODE

Service Mode

This unit and its remote controller (RQ-SX55V only) have a service mode which can be used to locate errors and faults (the remote controller and mstereo earphones are detachable. Refer to this document to provide service and repairs.

Quick reference for service mode errors

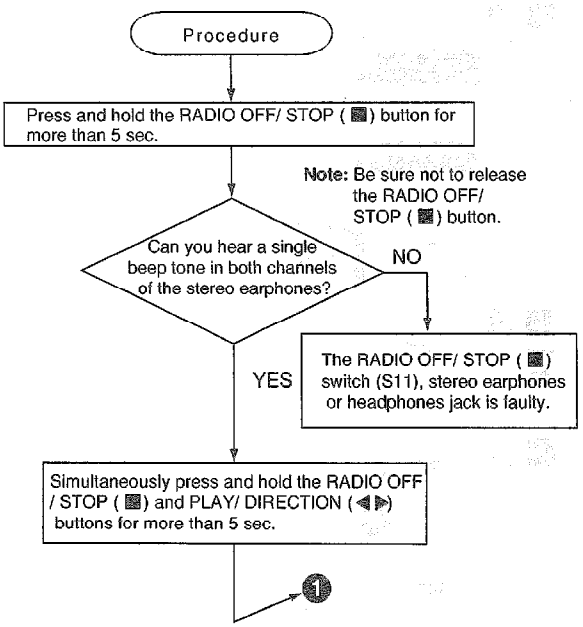
The following table shows error identification criteria:

Service mode		Component	Judgment criteria			
(1)	Unit and stereo earphones test	Unit	OK	OK	NG	NG
		Stereo earphones	OK	NG	OK	NG
		Location of fault	No faults	Stereo earphones	Unit	Unit and stereo earphones
(2)	Remote controller (RQ-SX55V only) and stereo earphones test	Remote controller (RQ-SX55V only)	OK	OK	NG	NG
		Stereo earphones	OK	NG	OK	NG
		Location of fault	No faults	Stereo earphones	Remote controller (RQ-SX55V only)	Remote controller (RQ-SX55V only) and stereo earphones

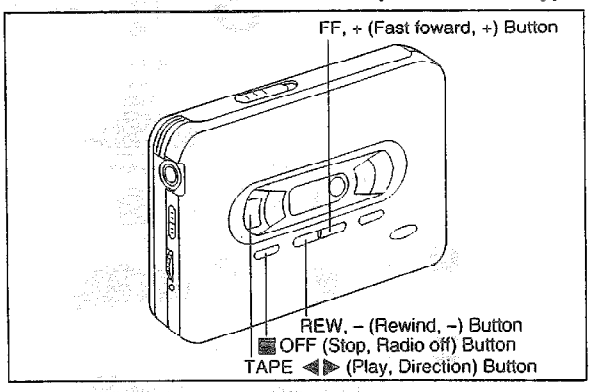
(1) Checking the unit and stereo earphones

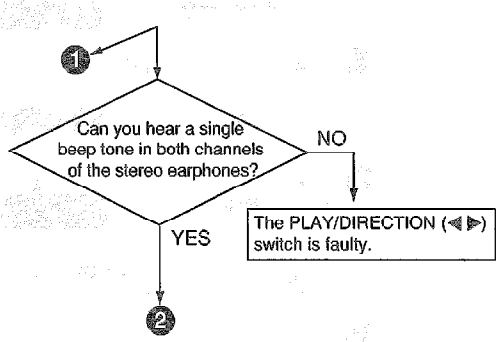
Preparations:

1. Firmly plug the stereo earphones into the headphones jack.
2. Install fully-charged rechargeable or R6/ LR6 dry cell batteries into the battery compartment.
3. Load a music tape into the unit and close the cassette compartment lid.
4. Make sure the HOLD button on the unit is off.
5. Press the MODE switch, and set the Blank Skip/Reverse Mode to "OFF/ ⊃ ".


Procedure
Press and hold the RADIO OFF/ STOP (■) button for more than 5 sec.
Note: Be sure not to release the RADIO OFF/ STOP (■) button.
Can you hear a single beep tone in both channels of the stereo earphones?
NO
YES
The RADIO OFF/ STOP (■) switch (S11), stereo earphones or headphones jack is faulty.
Simultaneously press and hold the RADIO OFF / STOP (■) and PLAY/ DIRECTION (◀ ▶) buttons for more than 5 sec.
1

• Location of controls on the unit (RQ-SX55V only)





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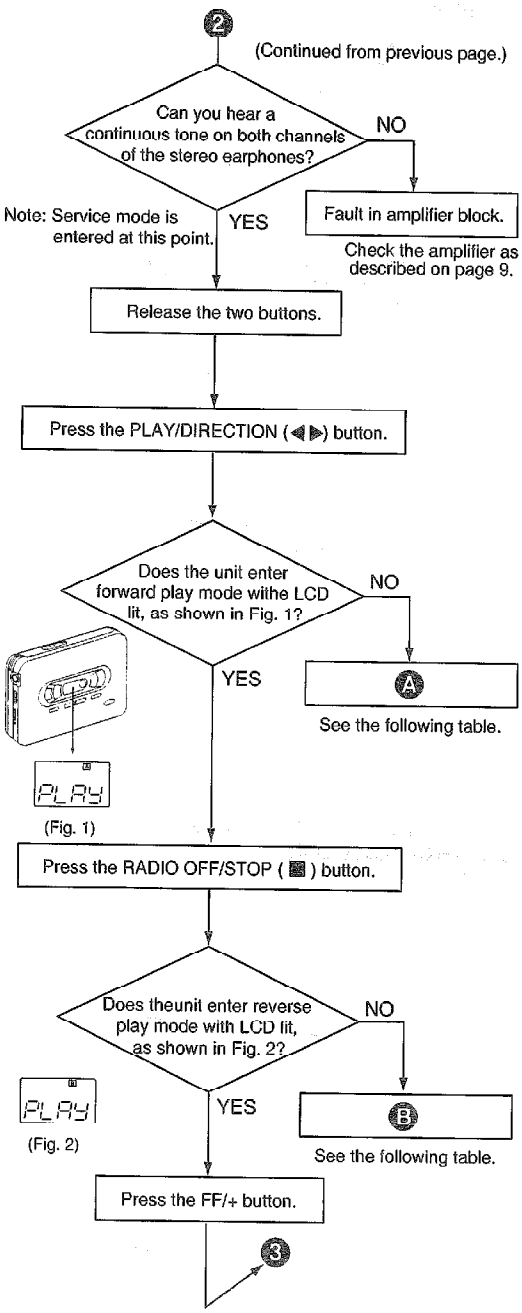
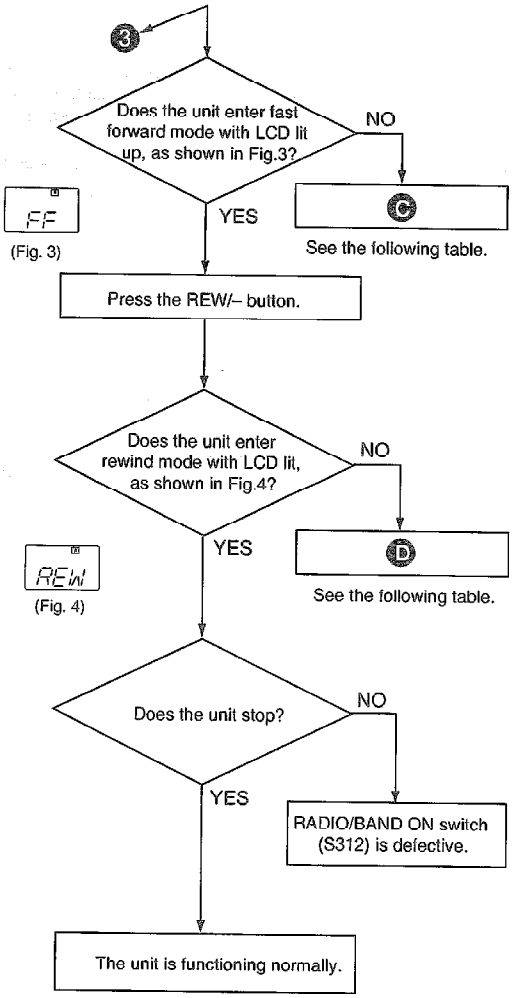

(Continued from previous page.)
Can you hear a continuous tone on both channels of the stereo earphones?
NO
YES
Note: Service mode is entered at this point.
Fault in amplifier block.
Check the amplifier as described on page 9.
Release the two buttons.
Press the PLAY/DIRECTION (◀▶) button.
Does the unit enter forward play mode withe LCD lit, as shown in Fig. 1?
NO
YES
See the following table.
PLAY
(Fig. 1)
Press the RADIO OFF/STOP (■) button.
Does theunit enter reverse play mode with LCD lit, as shown in Fig. 2?
NO
YES
PLAY
(Fig. 2)
See the following table.
Press the FF/+ button.



Note: Once the RADIO/BAND ON button is pressed and the unit stops, it exits the service mode.

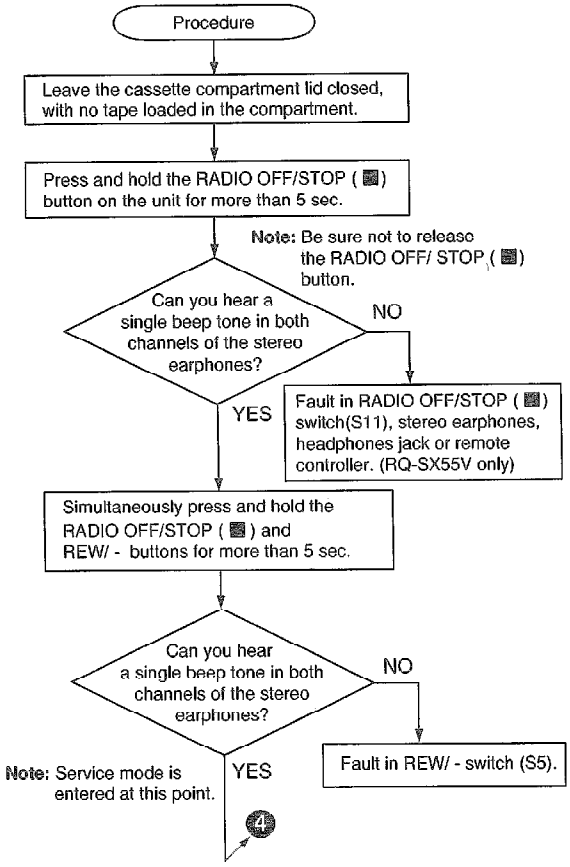
• Troubleshooting

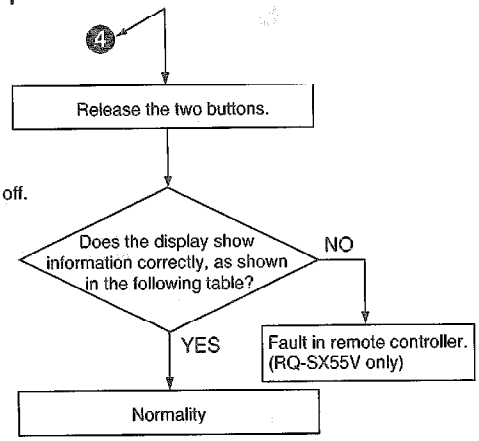
Location of fault	Symptom	Faulty component
Ⓐ	The unit fails to enter play mode or change the direction of play when the PLAY/DIRECTION (◀▶) button is pressed.	Fault in S7(PLAY/ DIRECTION), S11(RADIO OFF/ STOP) or motor.
Ⓑ		
Ⓒ	The unit fails to enter fast forward mode when the FF/+ button is pressed.	Fault in S8(FF/+).
Ⓓ	The unit fails to enter rewind mode when the REW/- button is pressed.	Fault in S5(REW/ -).

(2) Checking the remote controller (RQ-SX55V only) and stereo earphones

Preparations:

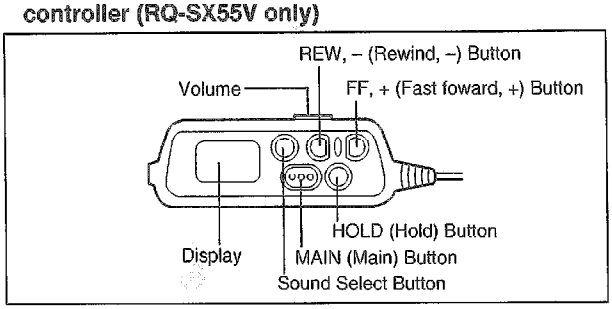
1. Firmly plug the remote controller into the headphones jack. (RQ-SX55V only)
   Firmly plug the stereo earphones into the headphones jack. (RQ-SX40V only)
2. Firmly plug the stereo earphones into the remote controller. (RQ-SX55V only)
3. Install fully-charged rechargeable or R6/ LR6 dry cell batteries into the battery compartment.
4. Leave the cassette compartment lid closed, with no tape loaded in the compartment.
5. Make sure the HOLD buttons on the unit and remote controller (RQ-SX55V only) are off.


Procedure
Leave the cassette compartment lid closed, with no tape loaded in the compartment.
Press and hold the RADIO OFF/STOP (■) button on the unit for more than 5 sec.
Note: Be sure not to release the RADIO OFF/ STOP (■) button.
Can you hear a single beep tone in both channels of the stereo earphones?
NO
YES
Fault in RADIO OFF/STOP (■) switch(S11), stereo earphones, headphones jack or remote controller. (RQ-SX55V only)
Simultaneously press and hold the RADIO OFF/STOP (■) and REW/ - buttons for more than 5 sec.
Can you hear a single beep tone in both channels of the stereo earphones?
NO
YES
Fault in REW/ - switch (S5).
Note: Service mode is entered at this point.
④

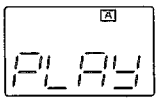
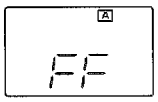
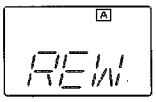
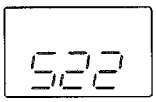


Note: The remote controller will continue to display the information last called up in service mode. Once the batteries are removed from the unit, it exits the service mode.

• Location of controls on the remote controller (RQ-SX55V only)



• Procedure for testing the remote controller (RQ-SX55V only)

Remote controller operation	Enters service mode. →	Press main button. →	Press FF button. →	Press REW button. →	Press One-repeat/ EQ button.
Normal information display					
	" PLAY " is displayed on the display panel.	" FF " is displayed on the display panel.	" REW " is displayed on the display panel.	" S22 " is displayed on the display panel.	After a single tone in the both channels of the stereo earphones hear, the display panel glows blue and " OFF " is displayed for about 5 sec.

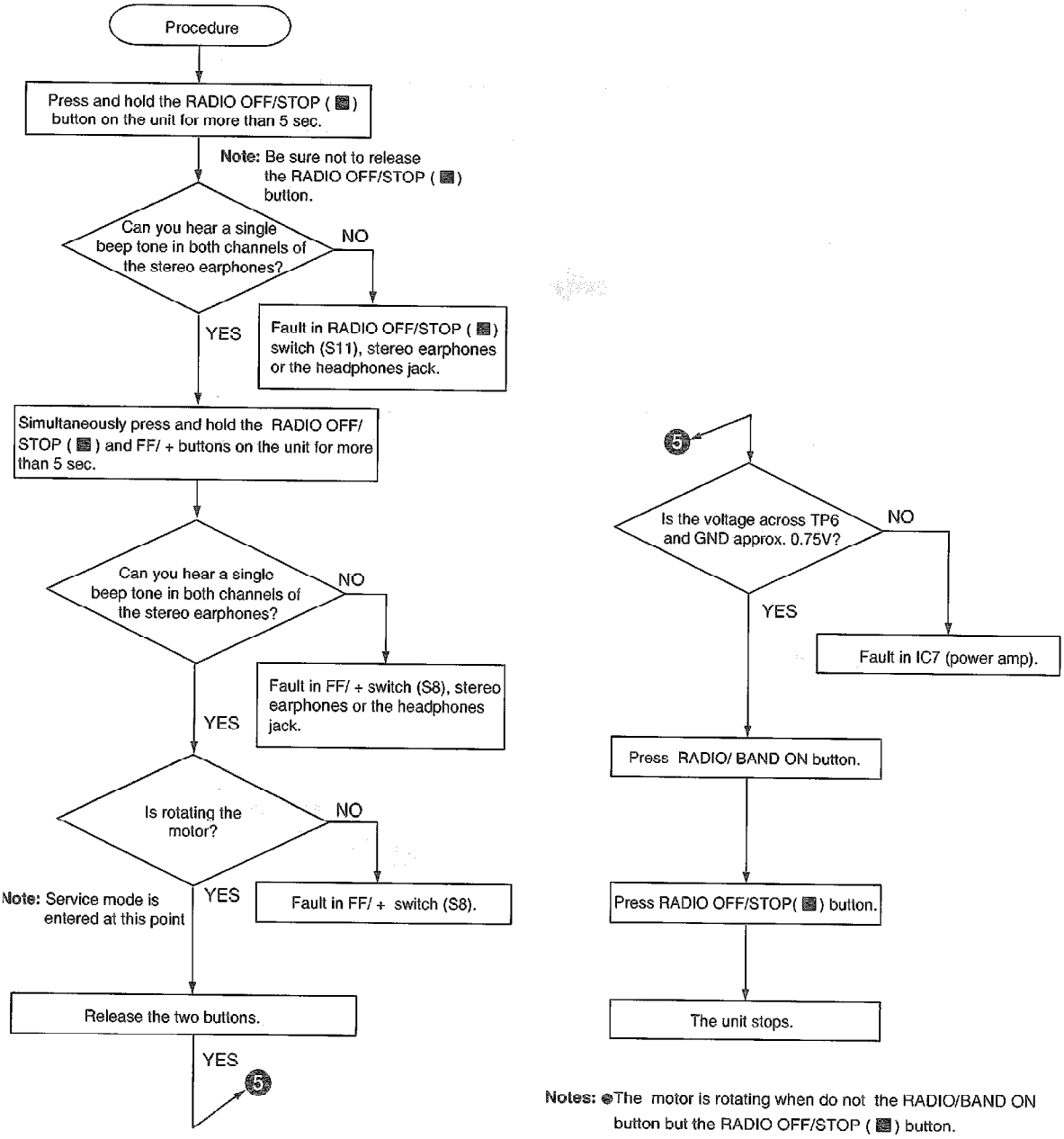
• The remote controller is functioning normally if it displays information as shown in the table above.

(3) Checking the amplifier block

The following procedure is only necessary if a fault in the amplifier block was detected during testing of the unit or stereo earphones.

Preparations:

1. Make sure the HOLD button on the unit is off.
2. Follow the steps described in Step 12 of checking for the main P.C.B. on page 11.
3. Firmly plug the stereo earphones into the headphones jack.


Procedure
Press and hold the RADIO OFF/STOP (■) button on the unit for more than 5 sec.
Note: Be sure not to release the RADIO OFF/STOP (■) button.
Can you hear a single beep tone in both channels of the stereo earphones?
NO
YES
Fault in RADIO OFF/STOP (■) switch (S11), stereo earphones or the headphones jack.
Simultaneously press and hold the RADIO OFF/ STOP (■) and FF/ + buttons on the unit for more than 5 sec.
Can you hear a single beep tone in both channels of the stereo earphones?
NO
YES
Fault in FF/ + switch (S8), stereo earphones or the headphones jack.
Is rotating the motor?
NO
YES
Note: Service mode is entered at this point
Fault in FF/ + switch (S8).
Release the two buttons.
YES
5
5
Is the voltage across TP6 and GND approx. 0.75V?
NO
YES
Fault in IC7 (power amp).
Press RADIO/ BAND ON button.
Press RADIO OFF/STOP(■) button.
The unit stops.

Notes: ●The motor is rotating when do not the RADIO/BAND ON button but the RADIO OFF/STOP (■) button.
●Push the RADIO/BAND ON button after the motor stopped.
●In service mode, the unit stays in fast forward mode until the RADIO OFF/STOP (■) button is pressed, at which time the unit exits service mode.

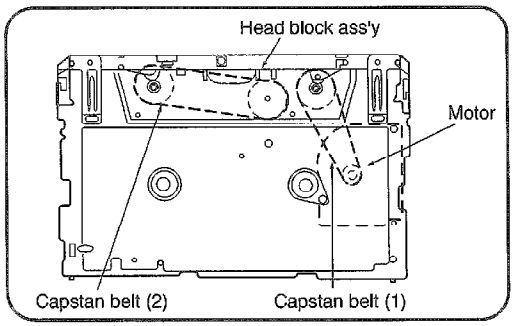
■Mechanism Block Replacement Procedure

• Mechanism block replacement

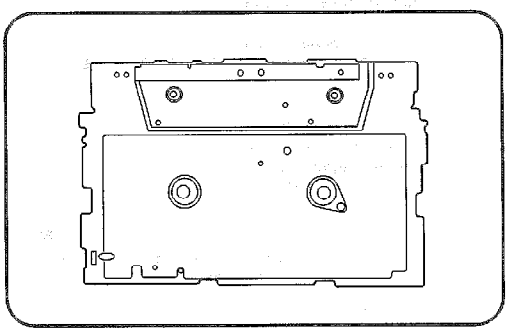
Repair parts are supplied in the form of a mechanism block ass'y, from which the head block, motor, and capstan belts (1) and (2) are removed.
Before replacing the mechanism block, perform the following steps :

Preparations

Remove the head block, motor, and capstan belts (1) and (2) from the unit, and install them in the mechanism block ass'y (for disassembly, refer to Operation Checks and Main Component Replacement Procedure).



Mechanism block
Fig. 1



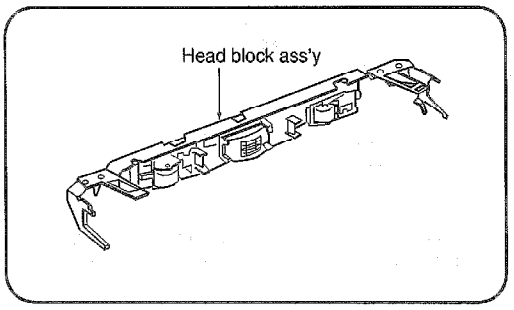
Mechanism block ass'y
Fig. 2

※ No adjustment is needed after replacement.

• Head block replacement

Repair parts are supplied in the form of a complete head block ass'y, which includes the head, head arm spring, and pinch roller arms (F) and (R) .
The head arm spring and pinch roller arms can also be supplied separately on request.

※No head azimuth adjustment is needed.



Head block ass'y
Fig. 3

Operation Checks and Component Replacement Procedures

NOTE

1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.
3. [ ] indicates parts No.

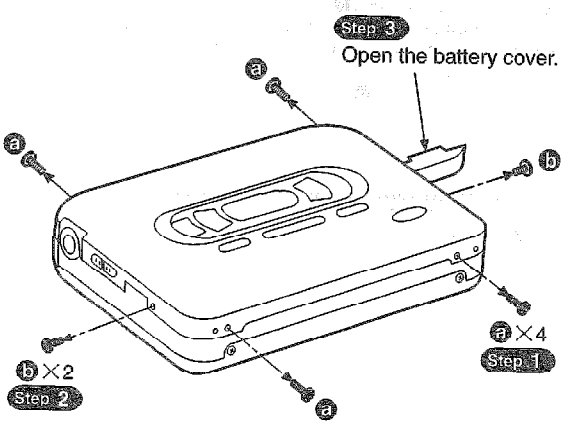
• Contents

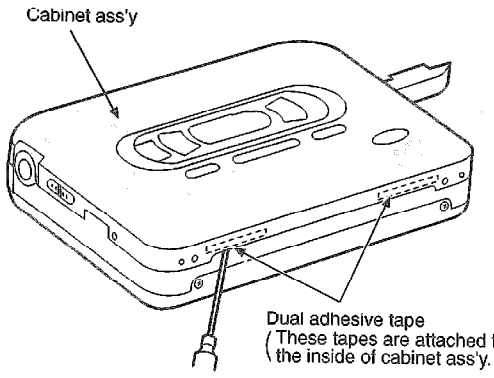
Page.

1. Checking for the main P.C.B. . . . . 11,12.
2. Replacement for the motor and capstan belt. . . . . 13.
3. Replacement for the intermediate ornament (A). . . . . 14.
4. Replacement for the head block ass'y. . . . . 14,15.

1. Checking for the main P.C.B.

〈Checking for the main P.C.B. (A side)〉



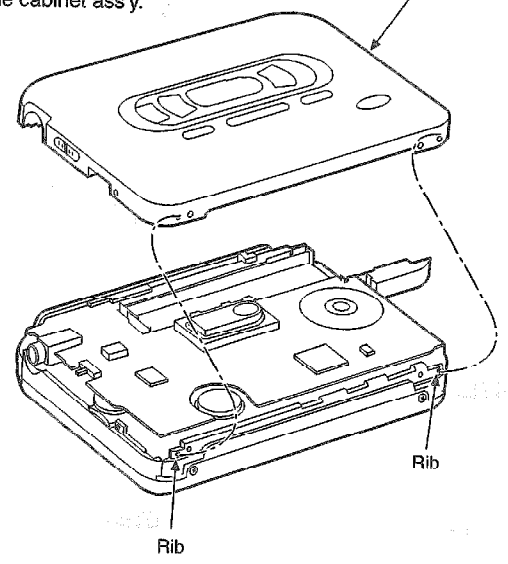


Step 4

Insert the thin tip of minus screwdriver into the clearance between the cabinet ass'y and intermediate cabinet ass'y, and then peel the tape off.

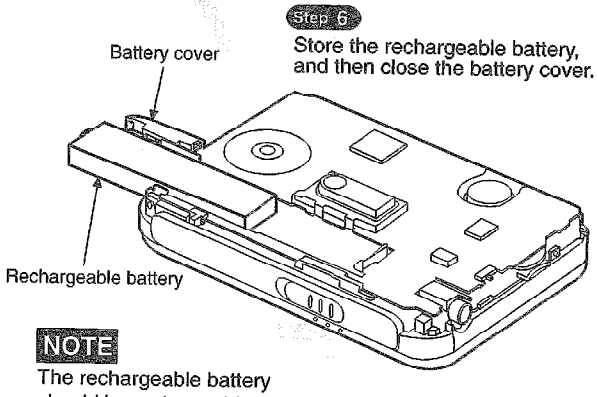
Step 5

When peeling the tape off, release the ribs and remove the cabinet ass'y.



Step 6

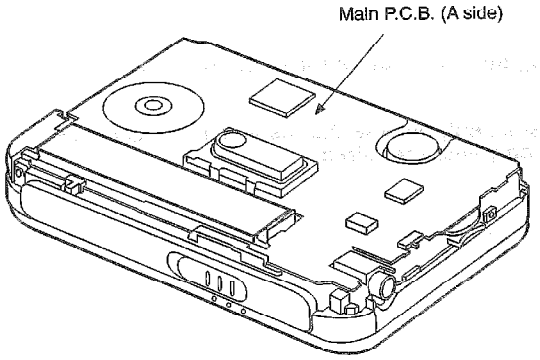
Store the rechargeable battery, and then close the battery cover.



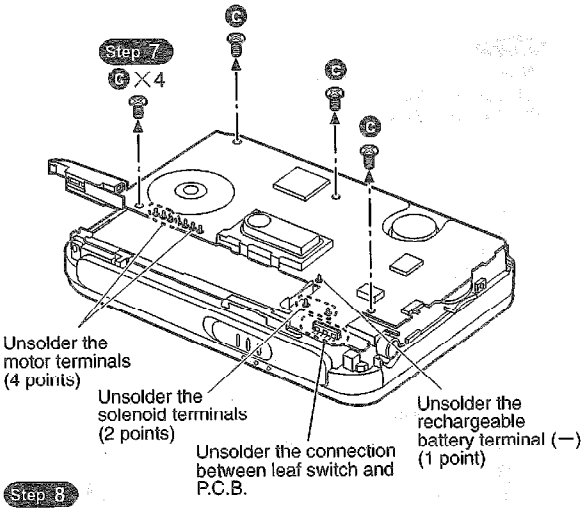
NOTE

The rechargeable battery should be recharged fully.

· **Check the main P.C.B. (A side) as shown below.**



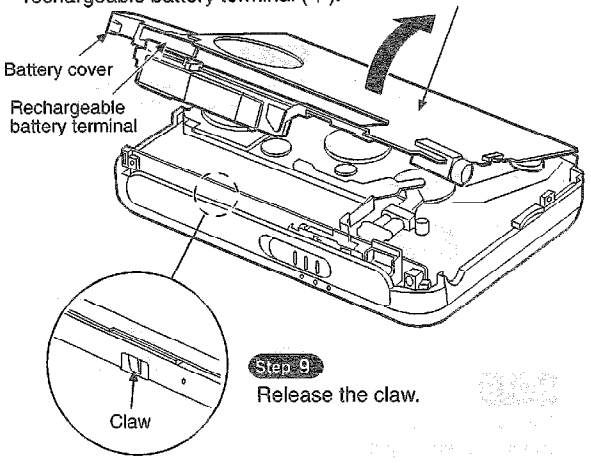
〈Removal for checking the main P.C.B. (B side)〉


Step 7
C×4
Unsolder the motor terminals (4 points)
Unsolder the solenoid terminals (2 points)
Unsolder the connection between leaf switch and P.C.B.
Unsolder the rechargeable battery terminal (−) (1 point)

Step 8
Unsolder each point.

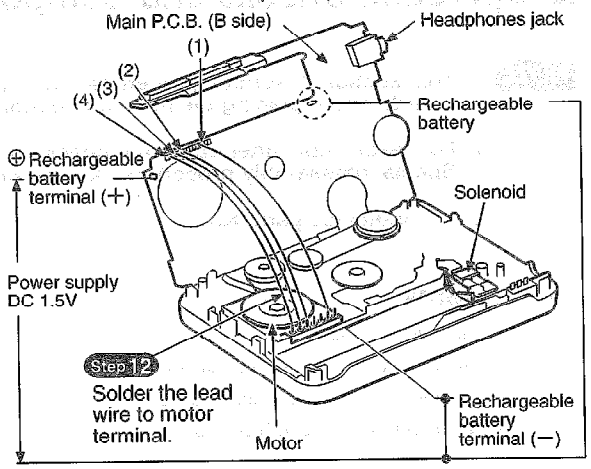
Step 11
Remove the battery cover and rechargeable battery terminal (+).

Step 10
Remove the main P.C.B. in the direction of arrow.



Step 9
Release the claw.

· **Check the main P.C.B. (B side) as shown below.**

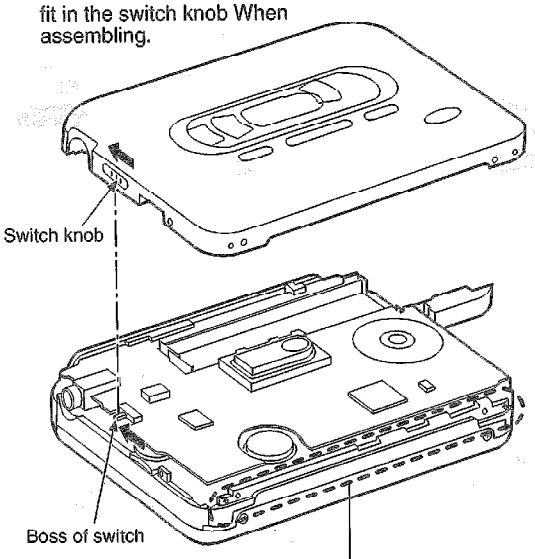


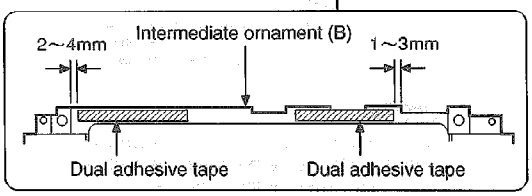
■Operation Checks

Confirm that the beeper sounds once by headphones when depressing the STOP (■) button more than 5 sec. under above condition, and then depress the STOP (■) and FWD (FF) buttons at same time more than 5 sec., so the FF mode will be operated.
Depress the STOP (■) button, and then that operation will be stopped.

Notice for installing the cabinet ass'y

1. Make sure the boss of switch are fit in the switch knob When assembling.

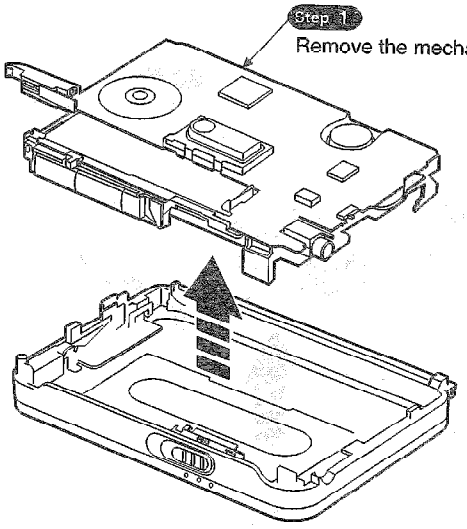


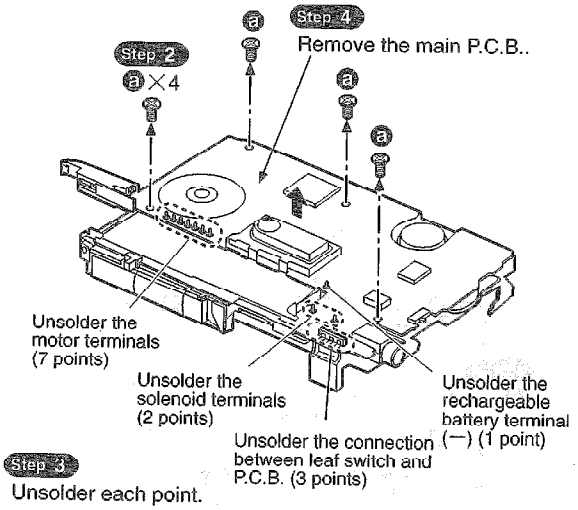


2. Apply the new dual adhesive tape to the intermediate ornament (B). (Peel the old tapes off completely.)

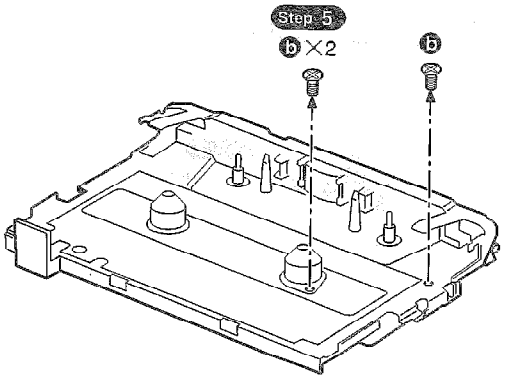
2. Replacement for the motor and capstan belt

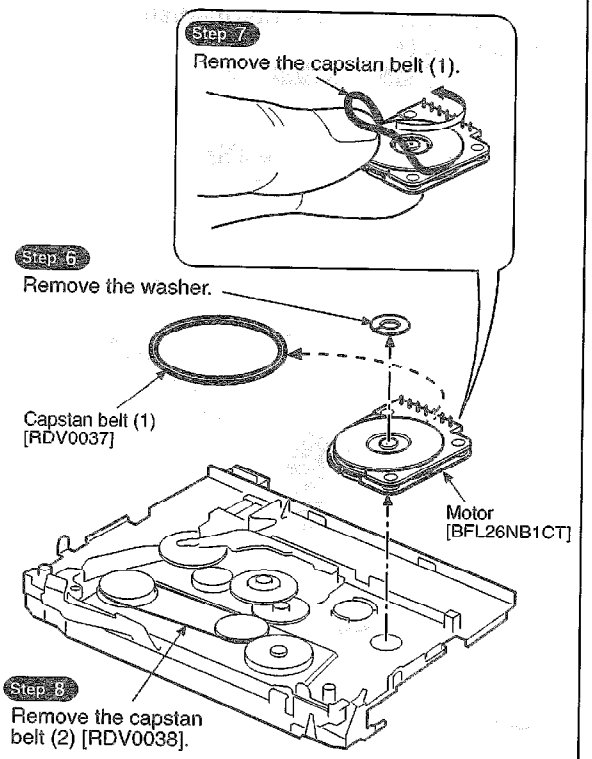
· Follow the Step 1 ~ Step 6 of the item 1 on page 11.




Step 2
ⓐ×4
Step 4
Remove the main P.C.B..
Unsolder the motor terminals (7 points)
Unsolder the solenoid terminals (2 points)
Unsolder the connection between leaf switch and P.C.B. (3 points)
Unsolder the rechargeable battery terminal (—) (1 point)

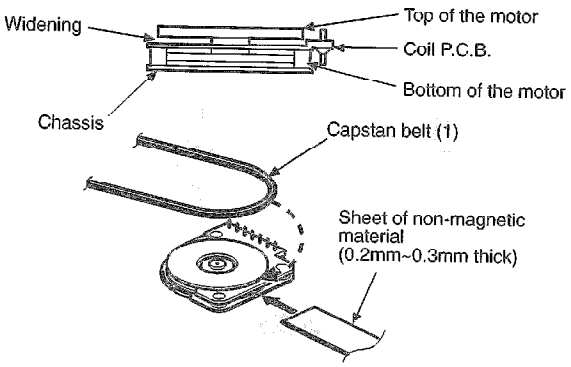
Step 3
Unsolder each point.

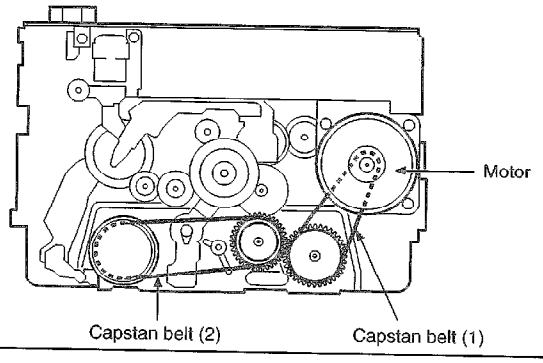




Installing the capstan belt (1)

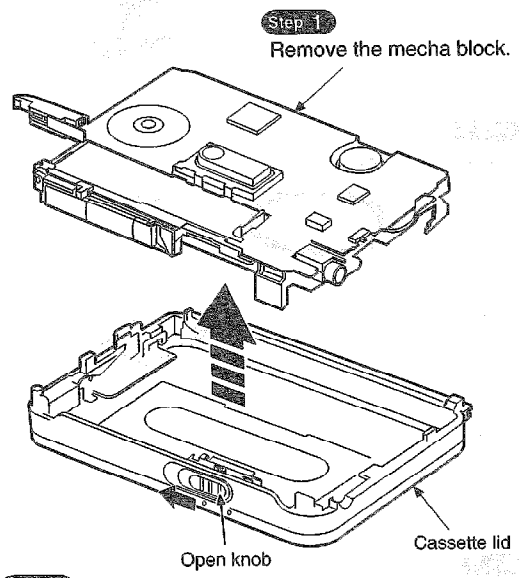
·When install the capstan belt (1) to motor, push up the motor by insert the non-magnetic material sheet between bottom of the motor and the chassis, and install the capstan belt (1) between top of the motor and the coil P.C.B..



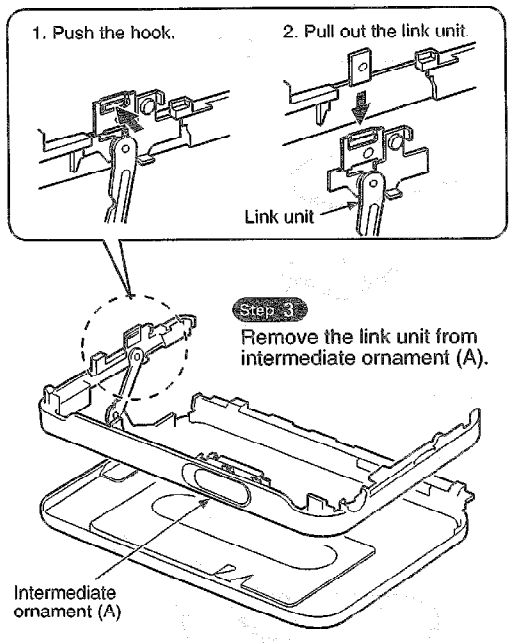


3. Replacement for the intermediate ornament (A)

· Follow the Step 1 ~ Step 6 of the item 1 on page 11.

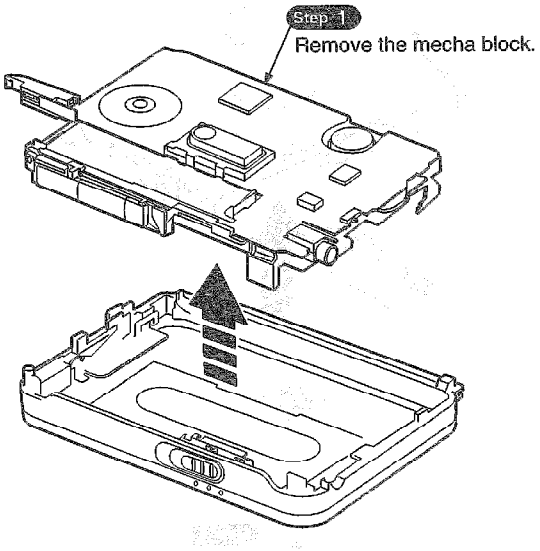


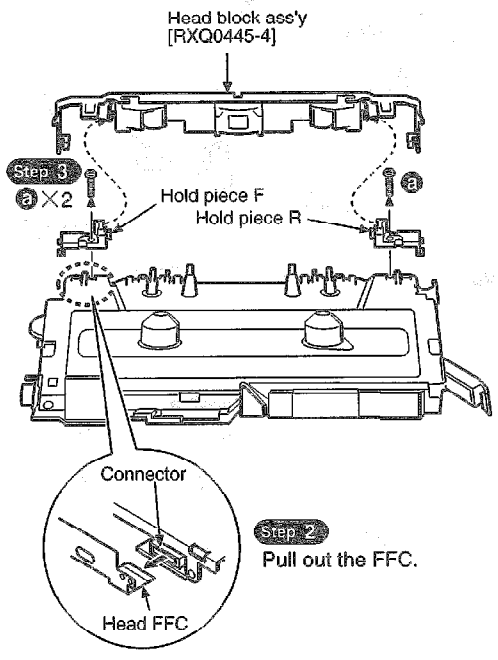
Step 2
Push the open knob, and then open the cassette lid.


1. Push the hook.
2. Pull out the link unit
Link unit
Step 3
Remove the link unit from intermediate ornament (A).
Intermediate ornament (A)

4. Replacement for the head block ass'y

· Follow the Step 1 ~ Step 6 of the item 1 on page 11.

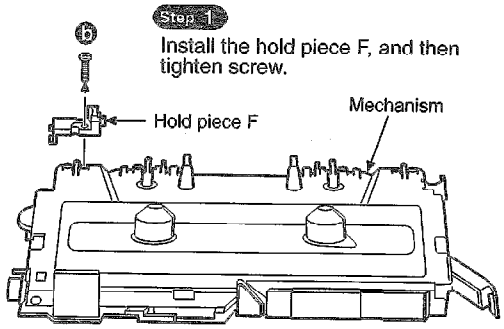




Assembly procedures for head block ass'y after replacement

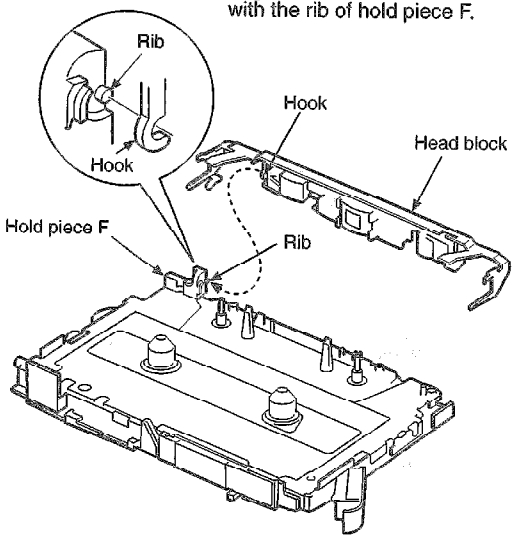
Step 1

Install the hold piece F, and then tighten screw.



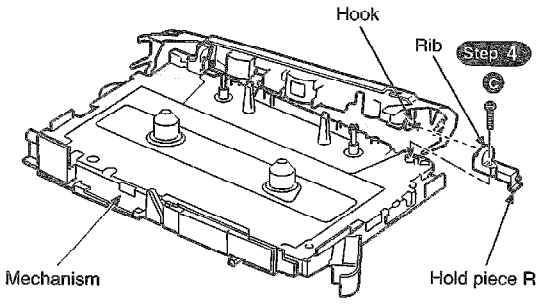
Step 2

Align the hook of head block ass'y with the rib of hold piece F.



Step 3

Align the hook of head block ass'y with the rib of hold piece R, and then install the hold piece R to the mechanism.



Mesurements and Adjustments

● Preparation for Adjustment

Follow " step 1~ step 12 " in item on pages 11, 12.

● Measurement Condition

1. Set volume control to maximum.
2. Set Dolby NR switch to OFF.
3. Set RADIO/BAND switch to ON (FM stereo, AM/FM adjustment).
4. Release the hold state.
5. Set power source voltage to 1.5V DC.

● Measuring Instruments and Special Tools

1. Signal generator (AM, FM)
2. Oscilloscope
3. Frequency counter

● Radio Section

● AM / FM Adjustment

Band	Signal Generator		Display Setting	Indicator (Oscilloscope)	Adjustment Point	Remarks
	Connection	Frequency				
AM	Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	594kHz	594kHz	Headphones jack (32Ω) (Refer to **Fig. 2**)	**L202** (Refer to **Fig. 3**)	Adjust **L202** for maximum output.
FM	TP131 or TP231 ... (+) TP132 or TP232 ... (–) (Refer to **Fig. 1**)	90MHz	90MHz	Headphones jack (32Ω) (Refer to **Fig. 2**)	**CT101** (Refer to **Fig. 3**)	Adjust **CT101** for maximum output.

● FM Stereo Adjustment

Item	Input	Output	Adjustment Point	Procedure
FM Stereo adjustment	76MHz, 66dB TP131 or TP231 ... (+) TP132 or TP232 ... (–) (Refer to **Fig. 1**)	TP118 or TP218 ... (+) TP132 or TP232 ... (–) (Connect a 220kΩ~330kΩ resistor between the test points TP118 or TP218 and TP132 or TP232 (Refer to **Fig. 1**)	**VR3** (Refer to **Fig. 2**)	Adjust **VR3** for **19 kHz ± 50 Hz** reading on frequency counter.

● Tape Section

Item	Test Tape	Measurement Point	Adjustment Point	Procedure
Tape speed adjustment	QZZCWAT (3kHz, −10dB)	Connect the frequency counter to Headphones jack (32Ω) (Refer to **Fig. 1**)	**VR601** (Refer to **Fig. 3**)	Playback the central part of the tape and adjust **VR601** so that the tape speed is as follows. Forward: **3005±15Hz** Reverse: **2970~3040Hz** Make sure that the frequency range in within **±60Hz** for between "Forward" and "Reverse" mode.

Note: The playback head is supplied on the head arm assembly. (See the "Mechanism Parts Location" on page 30.)
The assembly requires no adjustment.

• Adjustment Point

Note: This printed board diagram shows a view the layer 4 side of pattern drawing (A) as shown in **Fig. 1**.

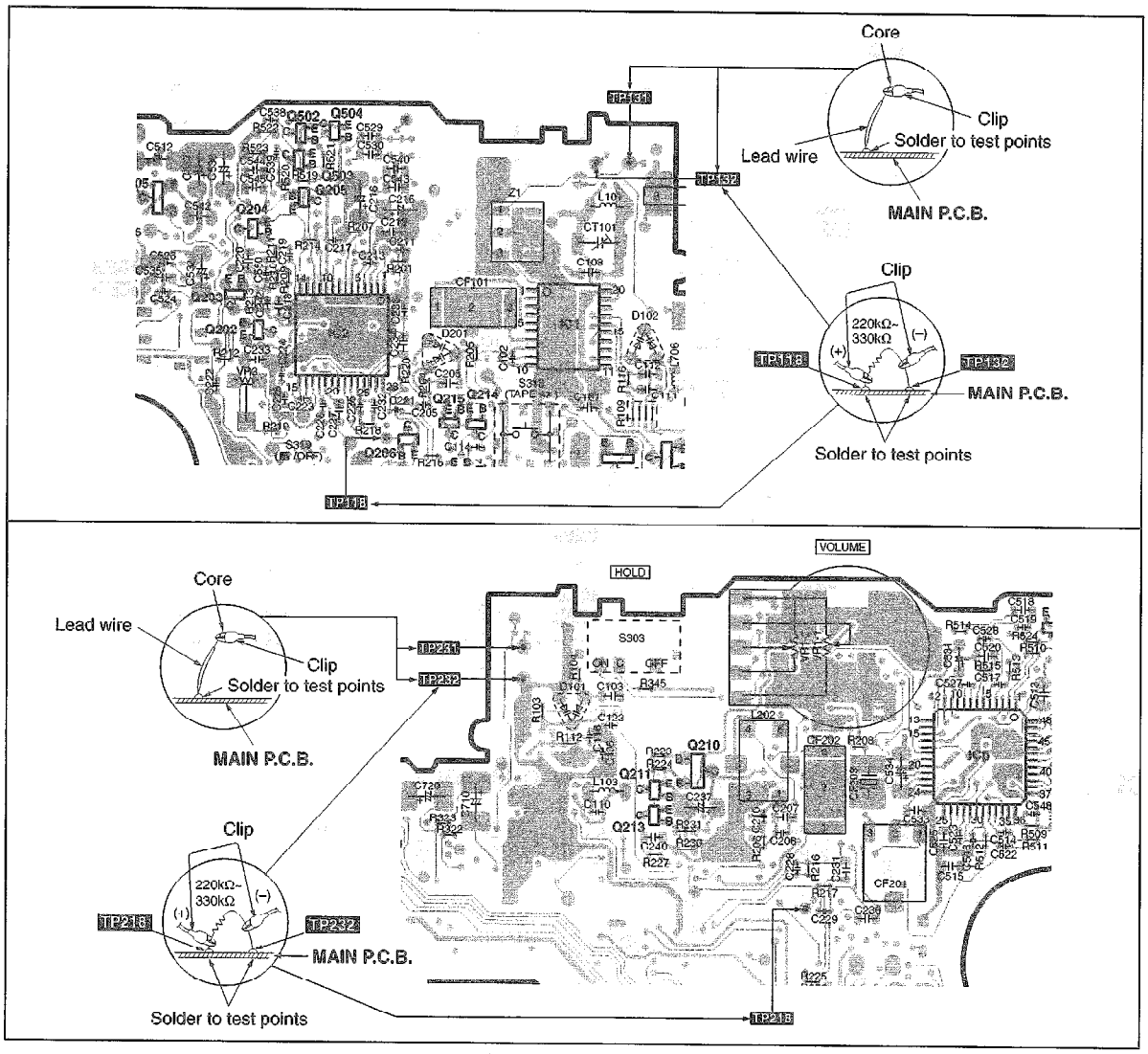


Fig. 1

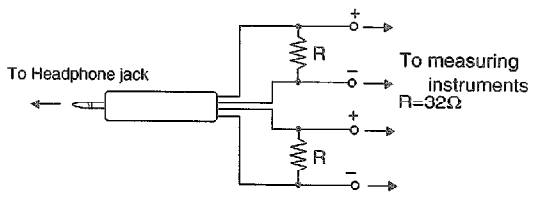


Fig. 2

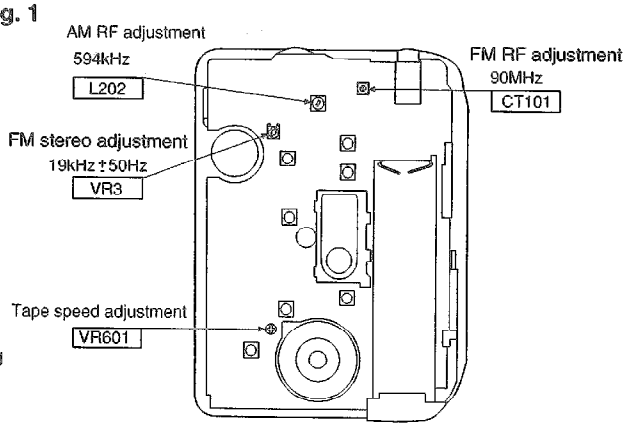
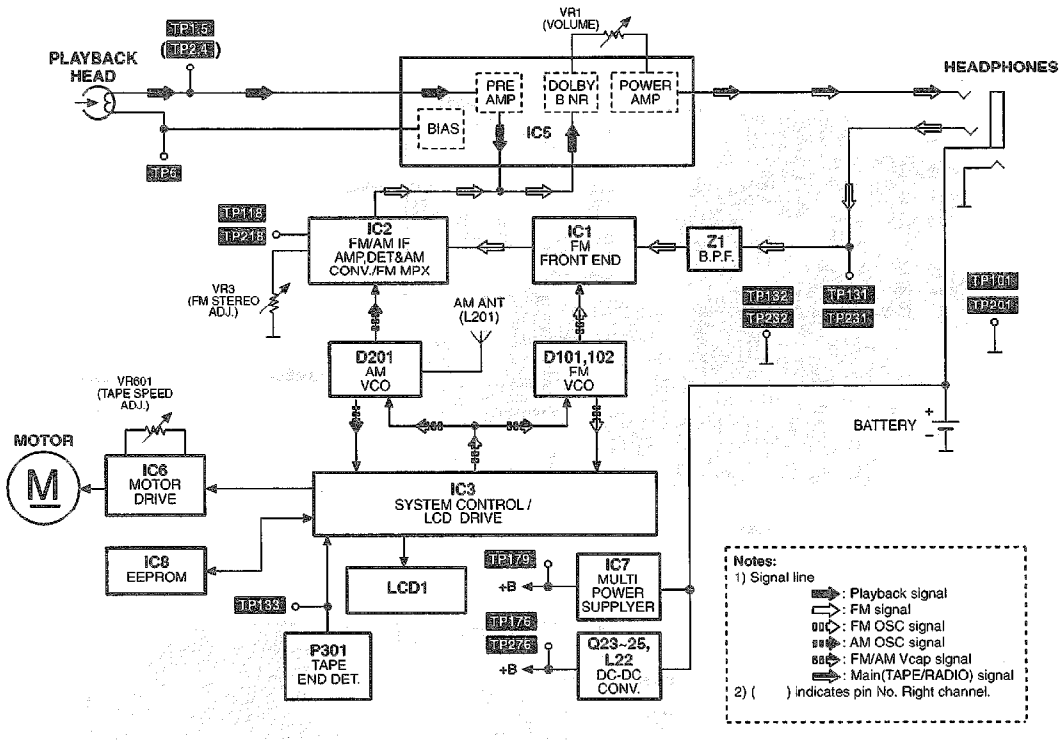


Fig. 3

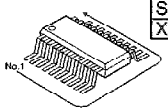
Note: This adjustment points shown a front view of the IC5 mounting surface as shown in **Fig. 3**.

Block Diagram

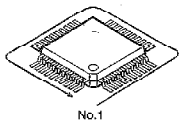


Type Illustration of IC's, Transistors and Diodes

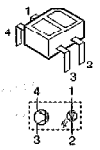
AN7208SA-E2	20PIN
AN7233SH-E2V	28PIN
MM1279XVBE	20PIN
S29L130AFSTB	8PIN
XC651A1001VR	16PIN



AN7500FHQ-EB	48PIN
UPD17934G509	80PIN



CNB1002001AU



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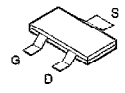
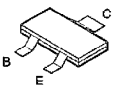
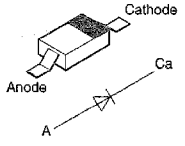


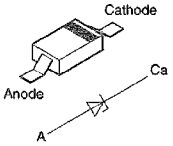


2SA1745-7-TL 2SD1048X7TX UN9116TX
2SA1774STL 2SD2216RTX UN9210TX
2SB815B7TX 2SD2216STX UN9214TX
2SB1295-6-TB 2SD2436STXRA UN9215TX
2SB1462RTX DTA143ZETL UNR911BJTX
2SB1462STX DTC143ZETL UNR921BJTX
2SC3931CTX UN9110TX
2SC3935TX UN9115TX

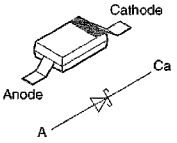
MA111TX



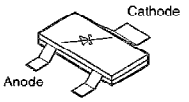
MA8120MTX



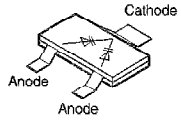
MA729TX



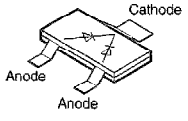
SB00703QTL



SVC347S-TL
RVDSVC203ATX



MA142WKTX



Schematic Diagram (See parts list on pages 30~32.)

●This schematic diagram may be modified at any time with development of new technology.)

Notes:

- ● **S13-1** : Tape IN/OUT det. switch in "OUT (OFF)" position. [IN (ON)...Tape in, OUT (OFF)...Tape out]
- ● **S13-2** : Tape detector (METAL/NORMAL) switch in "OFF (METAL)" position.
- ● **S301** : Mechanism det. (FWD/STOP/REV) switch in "FWD" position.
- ● **S303** : HOLD (HOLD) switch in OFF position.
- ● **S312** : RADIO/BAND (RADIO/BAND) select switch.
- ● **S313** : FF/+ (FF) switch.
- ● **S314** : REW/– (REW) switch.
- ● **S315** : MODE (MODE) select switch.
- ● **S316** : SOUND SEL (SOUND SEL) switch.
- ● **S317** : ·BATT. CHECK/ ▬ AUTO (·BATT. CHECK/ ▬ AUTO) switch.
- ● **S318** : TAPE/◀▮▶ (◀▮▶) switch.
- ● **S319** : ■/OFF (■) switch.
- ● **VR1** : Volume adjustment.
- ● **VR3** : FM stereo adjustment.
- ● **VR601** : Tape speed adjustment.
- ● DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.
  No mark...Playback, FM... < >, AM... ( )
- ● Current consumption of tape playback and radio mode: About 64 mA.
- ● Battery current:
  Vol. min...40 mA (FM) Vol. max...45 mA (FM)
  30 mA (AM) 33 mA (AM)
  36 mA (TAPE) 43 mA (TAPE)

Measurement instruction

AM:	74dB/m, 30% Mod.
FM:	60dB, 30% Mod.
TAPE:	315Hz, 0dB

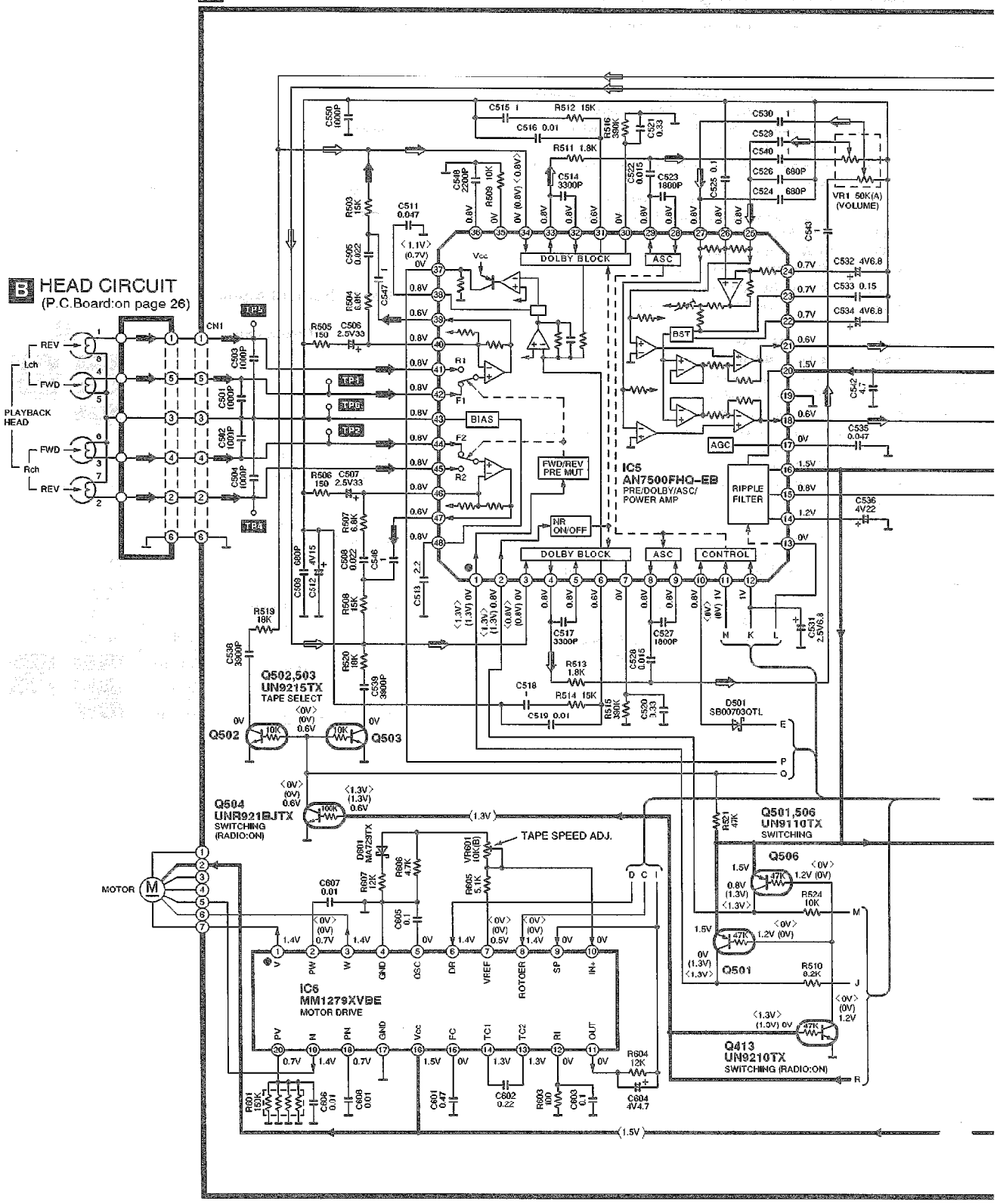
● Signal line

- ▬▶ : + B line
- ▭▷ : FM signal
- ▪▪▪▶ : AM OSC signal
- ▬▶ : Main (Tape/Radio) signal
- ▪▪▪▷ : FM/AM Vcap signal
- ▫▫▫▷ : FM OSC signal
- ▬▶ : Playback signal

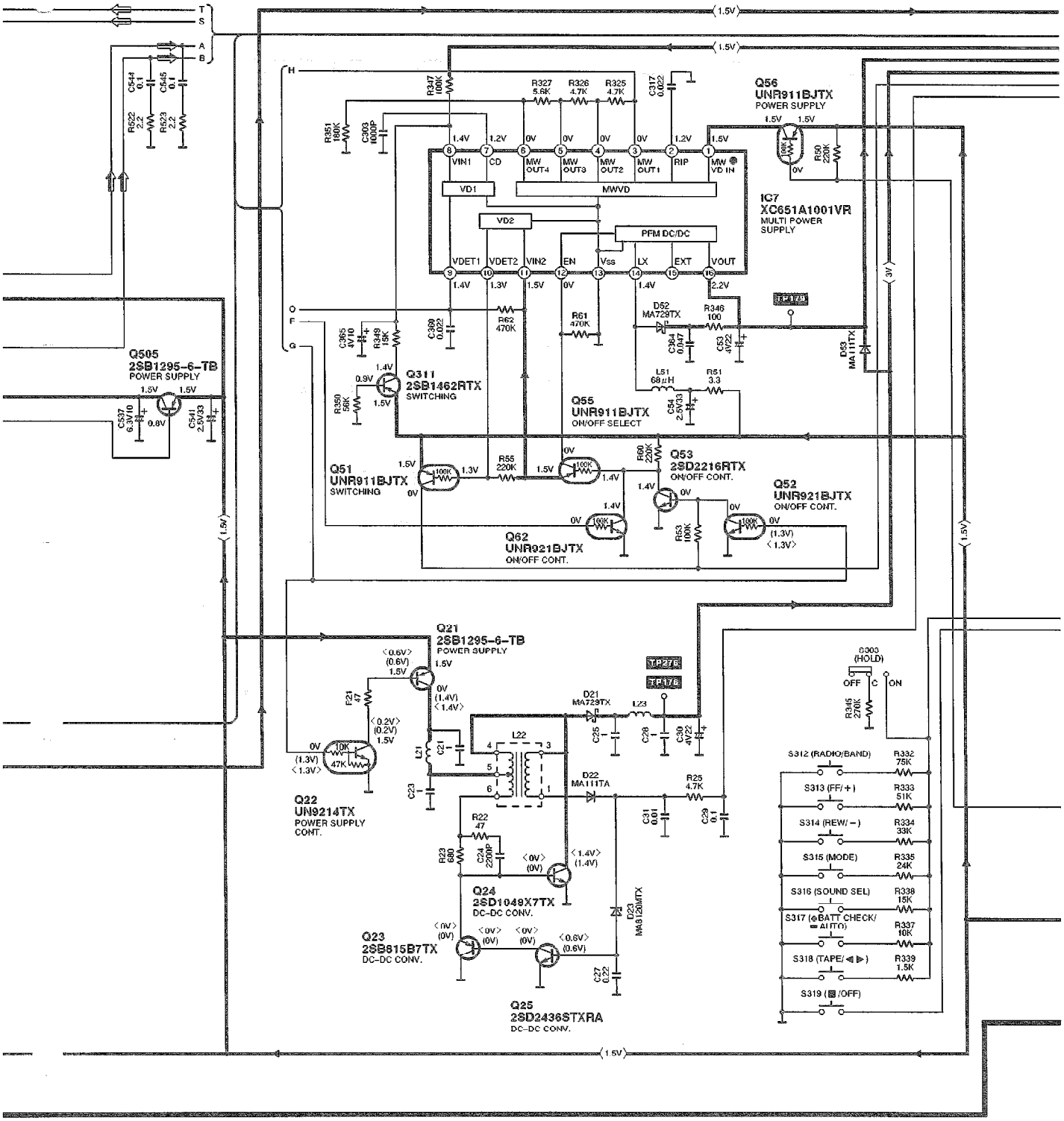
● Check Point of Signal

Check Item		TEST POINT
Head Input	L ch	TP1, TP5
	R ch	TP2, TP4
	VREF	TP6
Dolby Output → VR Input	L ch	VR Terminal
	R ch	VR Terminal
	COM	VR Terminal
VR input → VR Output	L ch	VR Terminal
	R ch	VR Terminal
	COM	VR Terminal
Power amp. Output → Headphones Output	L ch	Headphone Jack
	R ch	Headphone Jack
	COM	Headphone Jack
DC-DC Converter (Booster)	2.4V output	TP176 (TP276)
	GND	TP101 (TP201)
Photo Coupler (End)	Pulse output	TP133

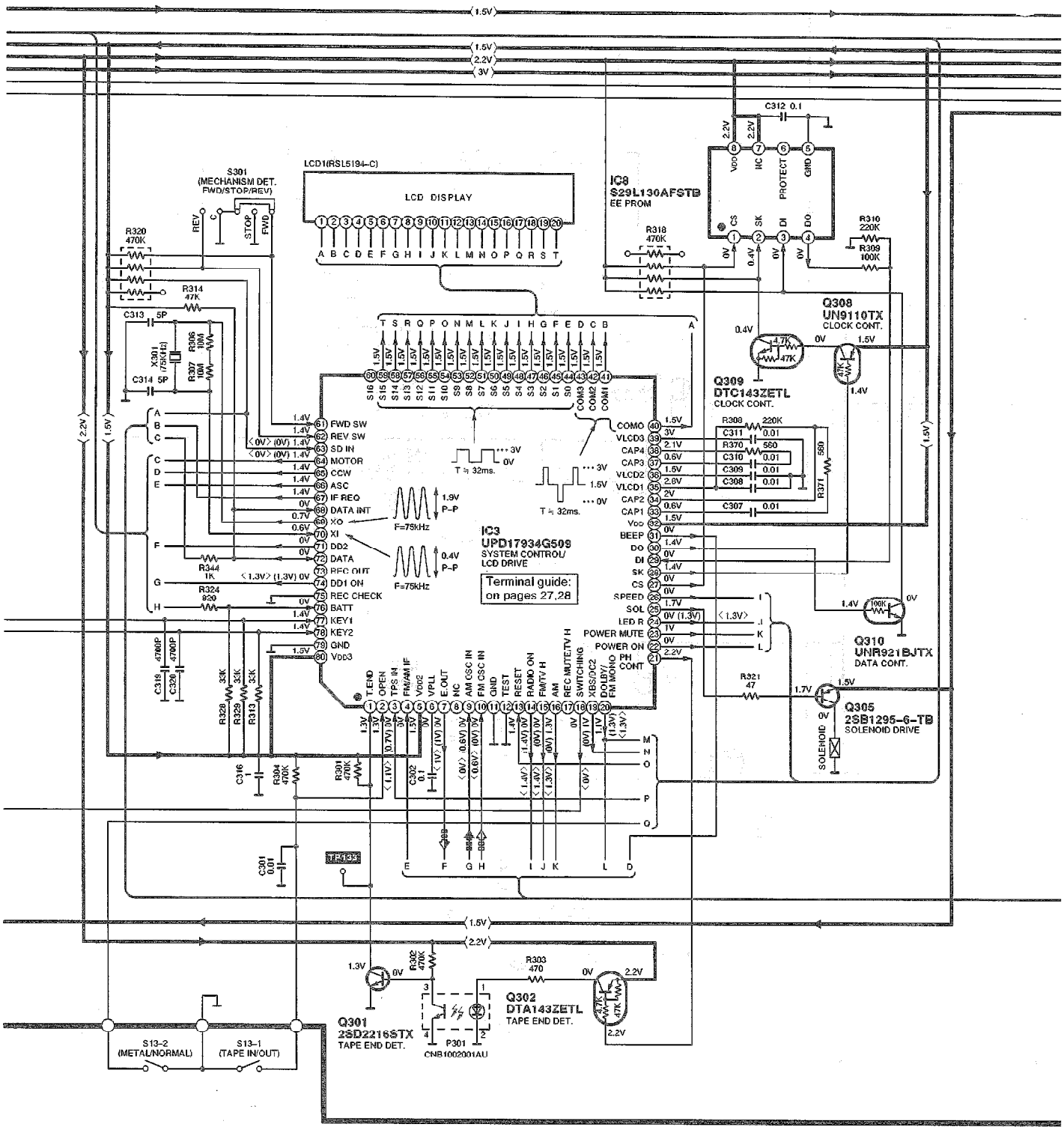
A MAIN CIRCUIT (P.C.Board:on pages 25,26)



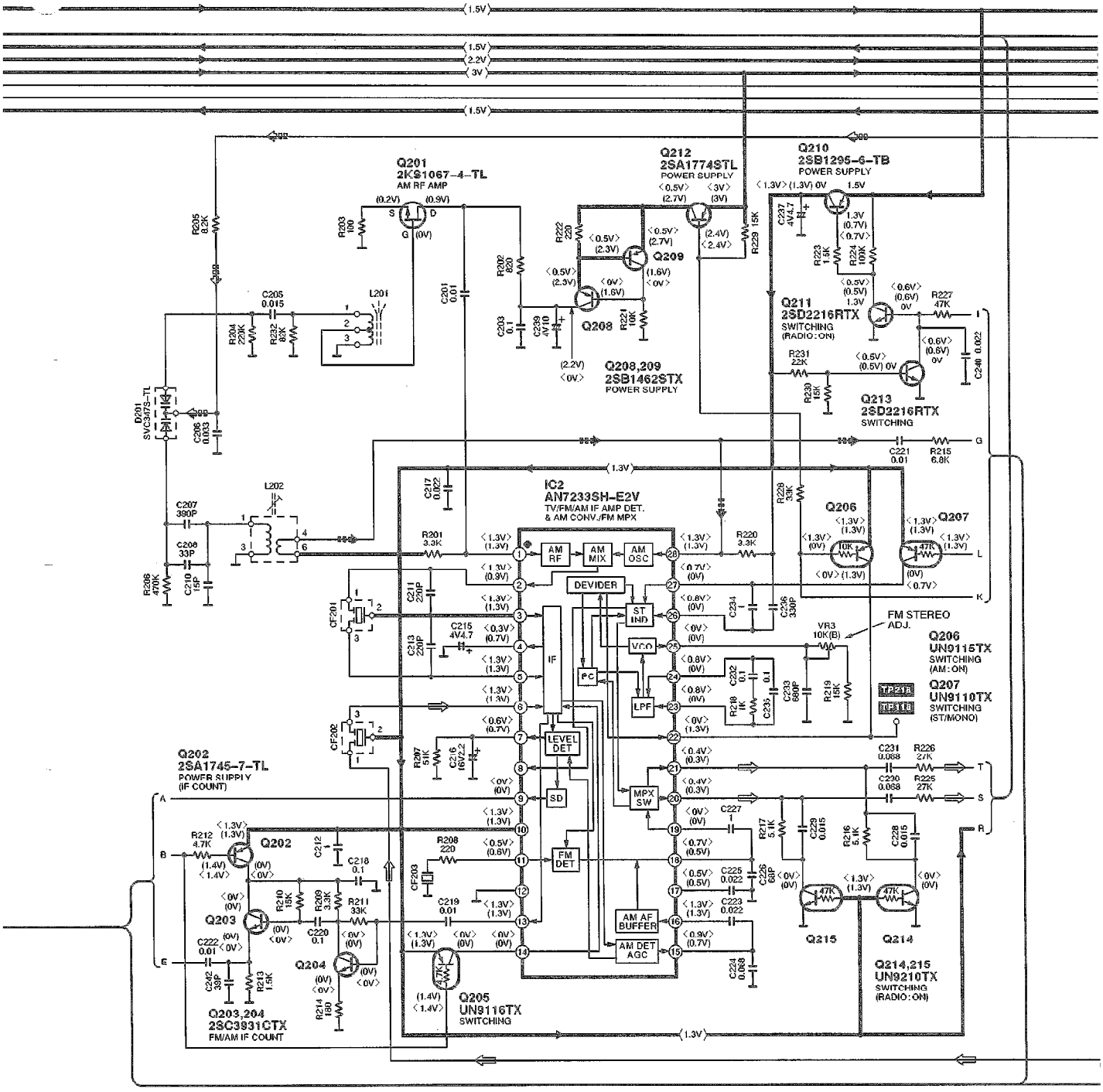
• Notes: ⇨ : FM signal line ➡ : Playback signal line
⇨ : Main (Tape/Radio) signal line



A MAIN CIRCUIT (P.C.Board:on pages 25,26)

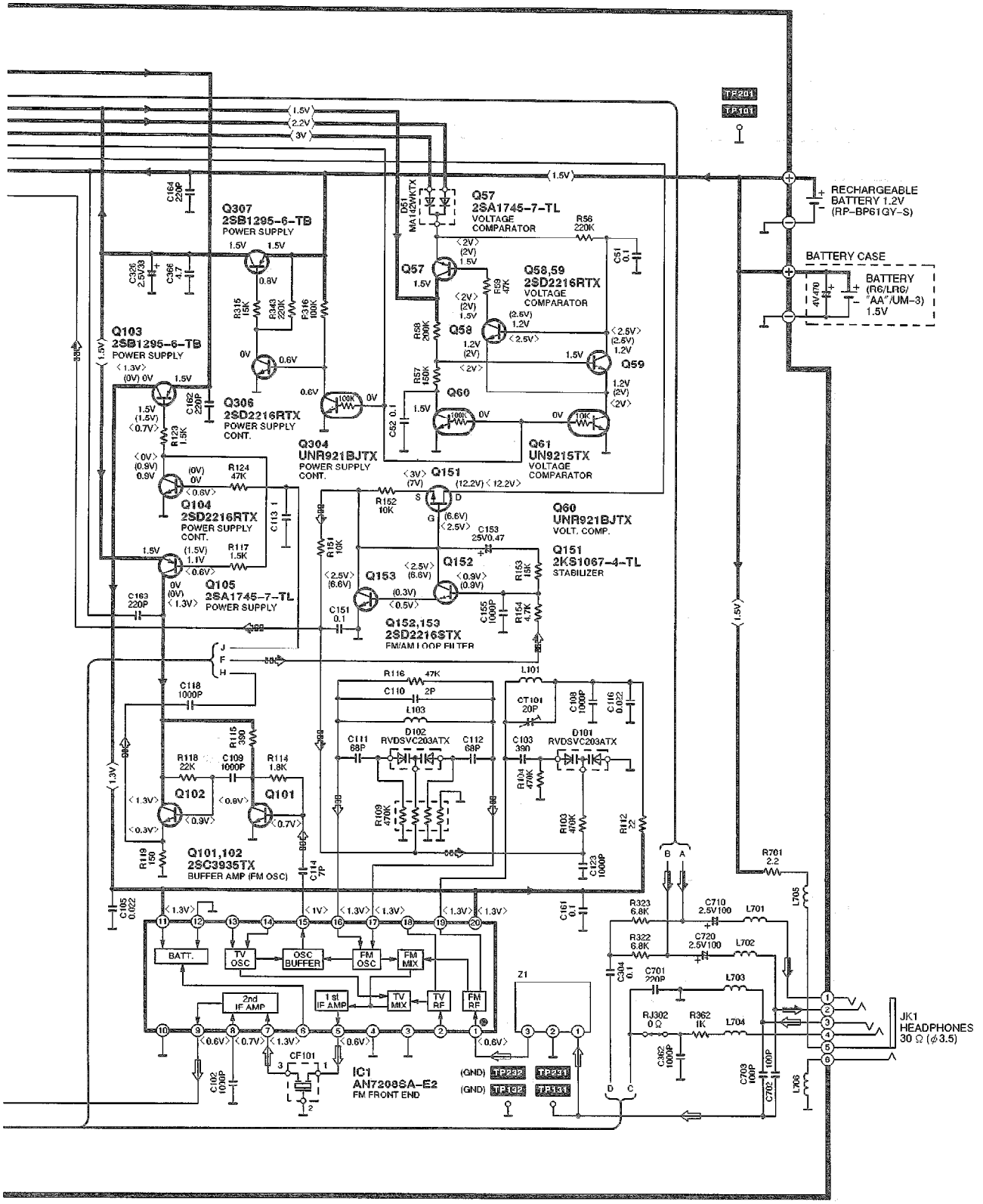


• Notes: : FM signal line : FM OSC signal line
: AM OSC signal line : FM/AM Vcap signal line



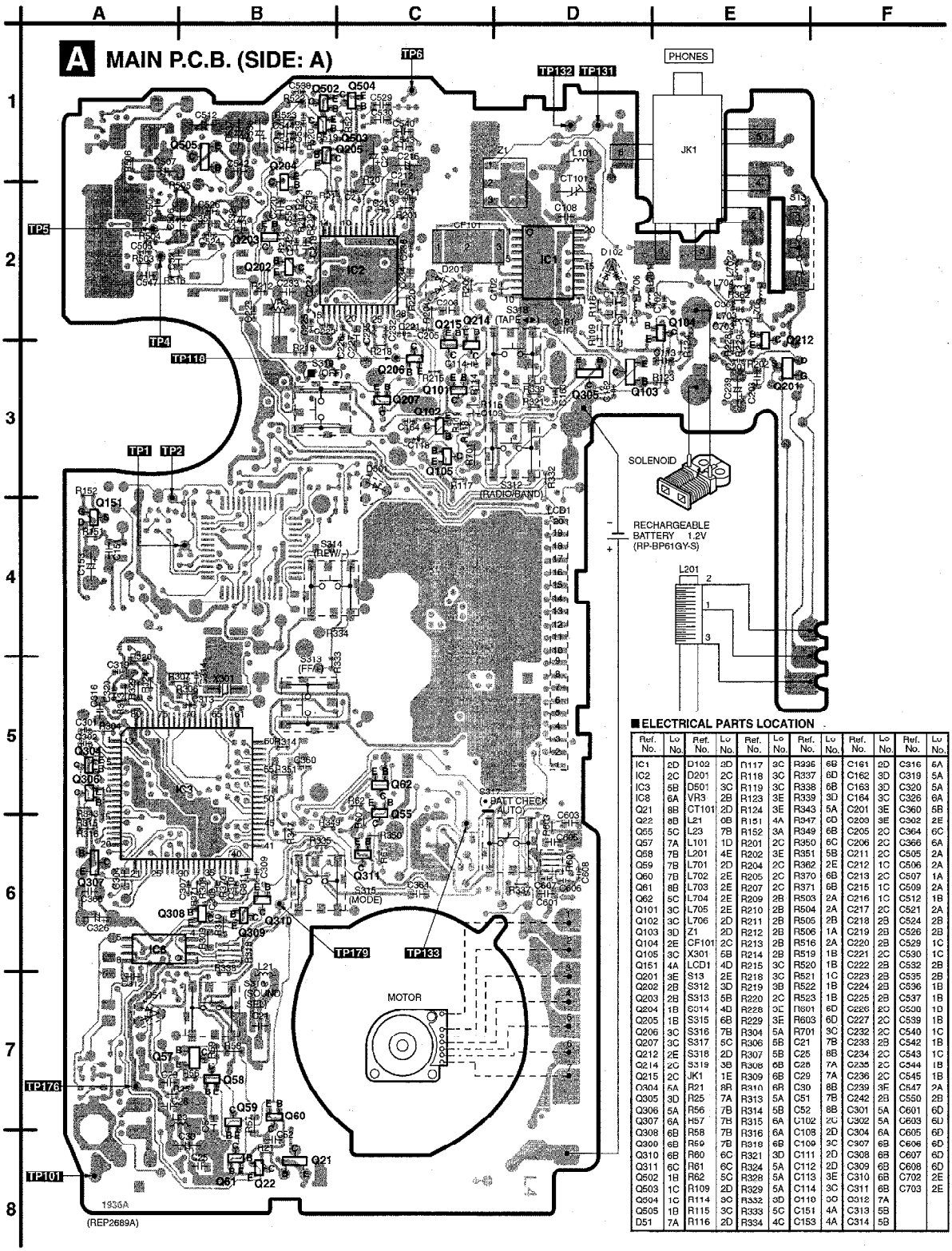
• Notes: ⇨ : FM signal line
⇨ : FM OSC signal line
⇨ : Main (Tape/Radio) signal line
⇨ : FM/AM Vcap signal line

A MAIN CIRCUIT (P.C.Board:on pages 25,26)



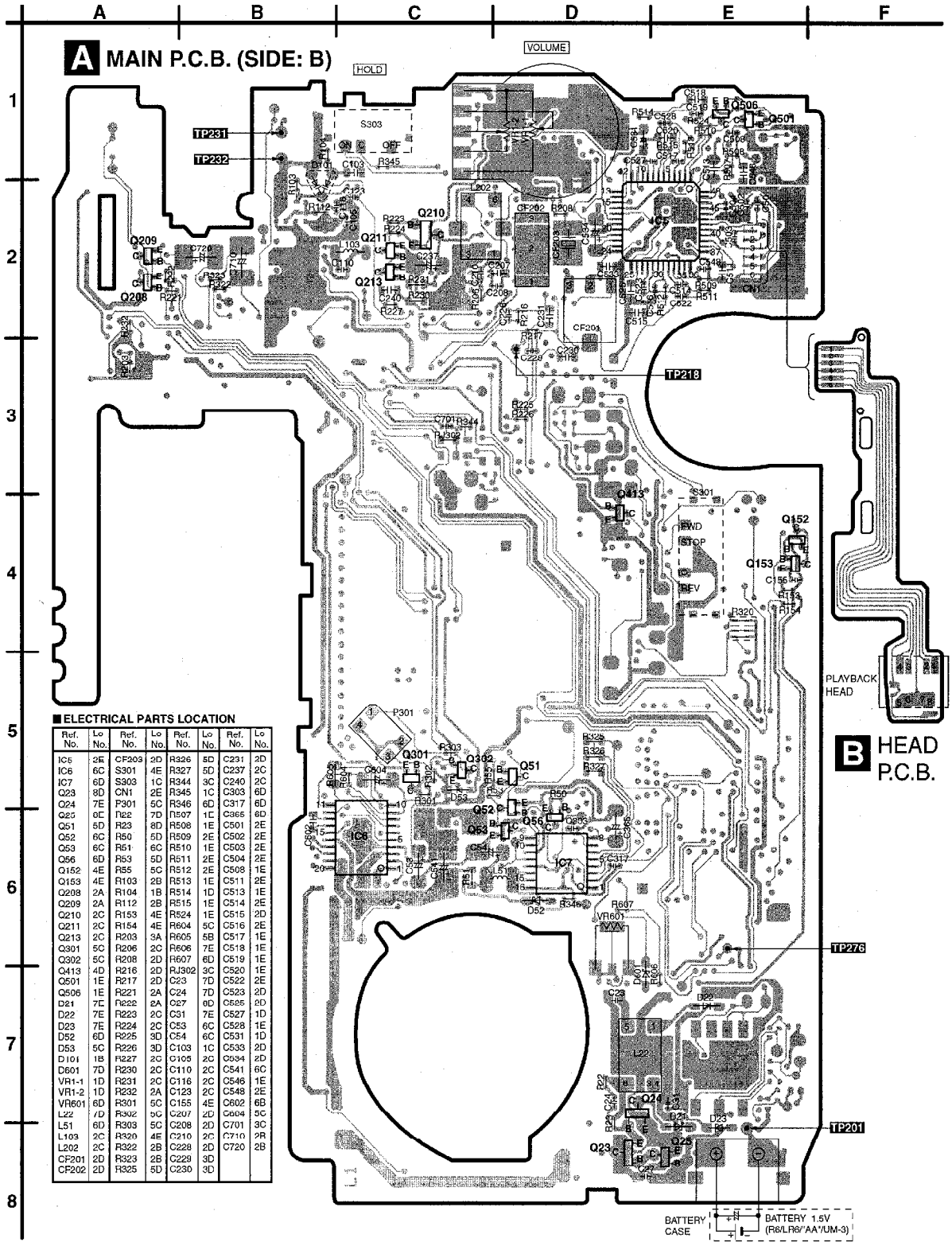
■Printed Circuit Board and Wiring Connection Diagram

(This printed circuit board diagram may be modified at any time with the development of new technology.)



■ELECTRICAL PARTS LOCATION

Ref. No.	Lo No.	Ref. No.	Lo No.	Ref. No.	Lo No.	Ref. No.	Lo No.	Ref. No.	Lo No.	Ref. No.	Lo No.
IC1	2D	D102	2D	R117	3C	R336	6B	C161	2D	C316	5A
IC2	2C	D201	2C	R118	3C	R337	6D	C162	3D	C319	5A
IC3	5B	D501	3C	R119	3C	R338	6B	C163	3D	C320	5A
IC8	6A	VR3	2B	R123	3E	R339	3D	C164	3C	C326	6A
Q21	8B	CT101	2D	R124	3E	R343	5A	C201	3E	C360	5B
Q22	8B	L21	6B	R151	4A	R347	6D	C209	3E	C362	2E
Q55	5C	L23	7B	R152	3A	R349	6B	C205	2C	C364	6C
Q57	7A	L101	1D	R201	2C	R350	6C	C206	2C	C366	6A
Q58	7B	L201	4E	R202	3E	R351	5B	C211	2C	C505	2A
Q59	7B	L701	2D	R204	2C	R362	2E	C212	1C	C506	2A
Q60	7B	L702	2E	R205	2C	R370	6B	C213	2C	C507	1A
Q61	8B	L703	2E	R207	2C	R371	6B	C215	1C	C509	2A
Q62	5C	L704	2E	R209	2B	R503	2A	C216	1C	C512	1B
Q101	3C	L705	2E	R210	2B	R504	2A	C217	2C	C521	2A
Q102	3C	L706	2D	R211	2B	R505	2B	C218	2B	C524	2B
Q103	3D	Z1	2D	R212	2B	R506	1A	C219	2B	C526	2B
Q104	2E	CF101	2C	R213	2B	R516	2A	C220	2B	C529	1C
Q105	3C	X301	5B	R214	2B	R519	1B	C221	2C	C530	1C
Q151	4A	LCD1	4D	R215	3C	R520	1B	C222	2B	C532	2B
Q201	3E	S13	2E	R218	3C	R521	1C	C223	2B	C535	2B
Q202	2B	S312	3D	R219	3B	R522	1B	C224	2B	C536	1B
Q203	2B	S313	5B	R220	2C	R523	1B	C225	2B	C537	1B
Q204	1B	S314	4D	R228	3E	R601	6D	C226	2C	C538	1D
Q205	1B	S315	6B	R229	3E	R603	6D	C227	2C	C539	1B
Q206	3C	S316	7B	R304	5A	R701	3C	C232	2C	C540	1C
Q207	3C	S317	5C	R306	5B	C21	7B	C233	2B	C542	1B
Q212	2E	S318	2D	R307	5B	C25	6B	C234	2C	C543	1C
Q214	2C	S319	3B	R308	6B	C26	7A	C235	2C	C544	1B
Q215	2C	JK1	1E	R309	6B	C29	7A	C236	2C	C545	1B
Q304	5A	R21	8B	R310	6B	C30	8B	C239	3E	C547	2A
Q305	3D	R25	7A	R313	5A	C51	7B	C242	2B	C550	2B
Q306	5A	R56	7B	R314	5B	C52	8B	C301	5A	C601	6D
Q307	6A	R57	7B	R315	6A	C102	2C	C302	5A	C603	6D
Q308	6B	R58	7B	R316	6A	C108	2D	C304	6A	C605	6D
Q309	6B	R59	7B	R318	6B	C109	3C	C307	6B	C606	6D
Q310	6B	R60	6C	R321	3D	C111	2D	C308	6B	C607	6D
Q311	6C	R61	6C	R324	5A	C112	2D	C309	6B	C608	6D
Q502	1B	R62	5C	R328	5A	C113	3E	C310	6B	C702	2E
Q503	1C	R109	2D	R329	5A	C114	3C	C311	6B	C703	2E
Q504	1C	R114	3C	R332	2D	C116	3C	C312	7A		
Q505	1B	R115	3C	R333	5C	C151	4A	C313	5B		
D51	7A	R116	2D	R334	4C	C153	4A	C314	5B		



■ELECTRICAL PARTS LOCATION

Ref. No.	Lo No.	Ref. No.	Lo No.	Ref. No.	Lo No.	Ref. No.	Lo No.
IC5	2E	CF203	2D	R326	5D	C231	2D
IC6	6C	S301	4E	R327	5D	C237	2C
IC7	6D	S303	1C	R344	3C	C240	2C
Q23	8D	CN1	2E	R345	1C	C303	6D
Q24	7E	P301	5C	R346	6D	C317	6D
Q25	6E	P22	7D	P507	1E	C365	6D
Q51	5D	R23	8D	R508	1E	C501	2E
Q52	6C	R50	5D	R509	2E	C502	2E
Q53	6C	R51	6C	R510	1E	C503	2E
Q56	6D	R53	5D	R511	2E	C504	2E
Q152	4E	R55	5C	R512	2E	C508	1E
Q153	4E	R103	2B	R513	1E	C511	2E
Q208	2A	R104	1B	R514	1D	C513	1E
Q209	2A	R112	2B	R515	1E	C514	2E
Q210	2C	R153	4E	R524	1E	C515	2D
Q211	2C	R154	4E	R604	5C	C516	2E
Q213	2C	R203	3A	R605	5B	C517	1E
Q301	5C	R206	2C	R606	7E	C518	1E
Q302	5C	R208	2D	R607	6D	C519	1E
Q413	4D	R216	2D	RJ302	3C	C520	1E
Q501	1E	R217	2D	C23	7D	C522	2E
Q506	1E	R221	2A	C24	7D	C523	2D
D21	7E	R222	2A	C27	6D	C525	2D
D22	7E	R223	2C	C31	7E	C527	1D
D23	7E	R224	2C	C53	6C	C528	1E
D52	6D	R225	3D	C54	6C	C531	1D
D53	5C	R226	3D	C103	1C	C533	2D
D101	1B	R227	2C	C105	2C	C534	2D
D601	7D	R230	2C	C110	2C	C541	6C
VR1-1	1D	R231	2C	C116	2C	C546	1E
VR1-2	1D	R232	2A	C123	2C	C548	2E
VR601	6D	R301	5C	C155	4E	C602	6B
L22	7D	R302	5C	C207	2D	C604	5C
L51	6D	R303	5C	C208	2D	C701	3C
L103	2C	R320	4E	C210	2C	C710	2B
L202	2C	R322	2B	C228	2D	C720	2B
CF201	2D	R323	2B	C229	3D		
CF202	2D	R325	5D	C230	3D		

Terminal Guide

• IC3 (UPD17934G509): SYSTEM CONTROL/LCD DRIVE

Pin No.	Mark	I/O Division	Function
1	T.END	I	Tape end detect signal input
2	OPEN	I	Tape in/out detect signal input
3	TPS IN	I	TPS control signal input
4	FM/AM IF	I	FM/AM IF control signal input
5	VDD2	I	Power supply
6	VPLL	—	Connected to capacitor
7	E.OUT	O	PLL error signal output
8	NC	—	Not used, open
9	AM OSC IN	I	AM OSC signal input
10	FM OSC IN	I	FM OSC signal input
11	GND	—	GND
12	TEST	—	Not used, open
13	RESET	I	Device reset signal input
14	RADIO ON	O	Radio on signal output
15	FM/TV H	O	Band select signal output (H: FM)
16	AM	O	Band select signal output (L: AM)
17	REC MUTE /TV H	O	Record control signal output
18	SWITCHING	O	Power control signal output
19	XBS/DC2	O	XBS control signal output
20	DOLBY /FM MONO	O	Dolby/FM mode control signal output
21	PH CONT	O	Photocoupler control signal output
22	POWER ON	O	Power control signal output
23	POWER MUTE	O	Muting control signal output
24	LED R	O	Head switching control signal output
25	SOL	O	Solenoid drive signal output

Pin No.	Mark	I/O Division	Function
26	SPEED	O	Motor speed up control signal output
27	CS	O	EEPROM CS output
28	SK	O	EEPROM serial clock output
29	DI	I	EEPROM data input
30	DO	O	EEPROM data output
31	BEEP	O	Beep signal output
32	VDD	I	Power supply
33	CAP1	—	Connected to capacitor
34	CAP2	—	
35	VLCD1	—	
36	VLCD2	—	
37	CAP3	—	
38	CAP4	—	
39	VLCD3	—	
40	COM0	O	LCD common signal output
41	COM1	O	
42	COM2	O	
43	COM3	O	
44	S0	O	LCD segment signal output
45	S1	O	
46	S2	O	
47	S3	O	
48	S4	O	
49	S5	O	
50	S6	O	

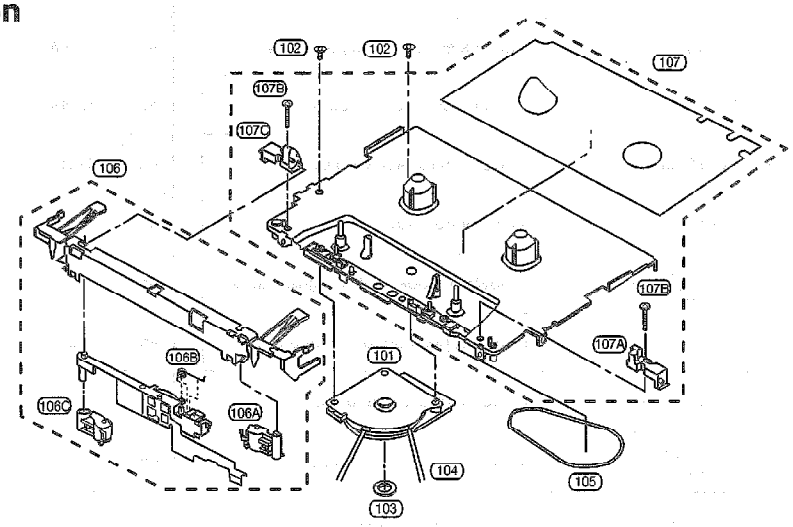
Pin No.	Mark	I/O Division	Function
51	S7	O	LCD segment signal output
52	S8	O	
53	S9	O	
54	S10	O	
55	S11	O	
56	S12	O	
57	S13	O	
58	S14	O	
59	S15	O	
60	S16	—	Not used, open
61	FWD SW	I	FWD play detect signal input
62	REV SW	I	REV play detect signal input
63	SD IN	I	SD input
64	MOTOR	O	Motor control signal output
65	CCW	O	Motor reverse drive control signal output

Pin No.	Mark	I/O Division	Function
66	ASC	O	Sound control signal output
67	IF REQ	O	IF request signal output
68	DATA INT	I	Remote controller signal input
69	X0	O	Crystal OSC (75 kHz)
70	X1	I	
71	DD2	O	DC-DC converter control signal output
72	DATA	I/O	Serial data input/output
73	REC OUT	—	Record bias control signal output (Not used, open)
74	DD1 ON	O	DC-DC converter control signal output
75	REC CHECK	—	Record prevention tab detect signal input
76	BATT	I	Battery check signal input
77	KEY1	I	Operation switch signal input
78	KEY2	I	
79	GND	—	GND
80	VDD3	I	Power supply

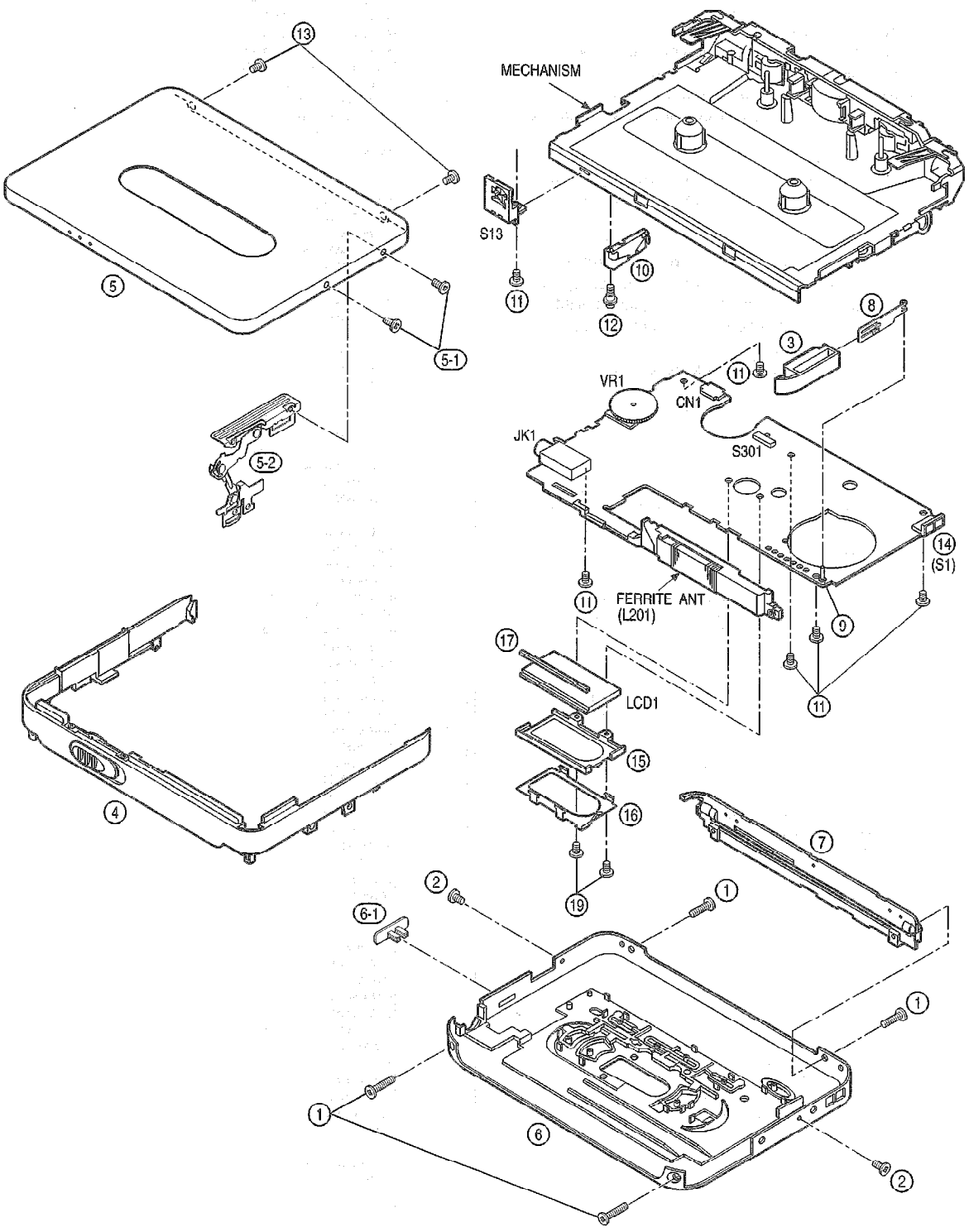
Mechanism Parts Location

Item	FWD & REV mode
Wow and flutter	0.3 % (WRMS)
Pressure of pinch roller	110±10 g
Take-up tension	More than 60 g
Playback torque	20±5 g
FF/REW torque	More than 60 g · cm

The parts enclosed in the dotted boxes are supplied as a block assembly. Therefore, they are not supplied separately except parts indicated with Ref. No.



Cabinet Parts Location



Replacement Parts List

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.) Parts without these indications can be used for all areas.

*Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)

*Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM)

※This item is not attached to marchandise, but it is supplied as a replacement parts.

* "<IA>" mark in Remarks indicate language of instruction manual.
[<IA>: English, Russian, Chinese, Korean]

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	RHDI4058-S	SCREW	4	
2	RHDI4057-S	SCREW	2	
3	RKK0100-A	BATTERY COVER	1	(A)
3	RKK0100-S	BATTERY COVER	1	(S)
4	RYQ0214A-A	INTERMEDIATE ORNAMENT(A)	1	RQ-SX55V
4	RYQ0214A-H	INTERMEDIATE ORNAMENT(A)	1	RQ-SX40V
5	RYF0468-A	CASSETTE LID ASS'Y	1	(A)
5	RYF0468-S	CASSETTE LID ASS'Y	1	(S)
5-1	RHQ0062-S	SCREW	2	
5 2	RXM0067	LINK UNIT	1	
6	RYK0814B-A	CABINET ASS'Y	1	RQ-SX55V(A)
6	RYK0814B-S	CABINET ASS'Y	1	RQ-SX55V(S)
6	RYK0814D-S	CABINET ASS'Y	1	RQ-SX40V
6-1	RGV0227-H	KNOB	1	
7	RYK0815A-H	INTERMEDIATE ORNAMENT(B)	1	
8	RJC99027	R.BATTERY TERMINAL(+)	1	
9	RJR0154-1	BATTERY SHAFT	1	
10	RJC99028	R.BATTERY TERMINAL(-)	1	
11	RHQ0060-N	SCREW	6	
12	RHQ0013-1	SCREW	1	
13	RHQ0032-S	SCREW	2	
14	RJH9208-1	CONNECTION TERMINAL(S1)	1	
15	RGP0666-Q	LCD PANEL	1	
16	RMA1155	LCD HOLDER	1	
17	RSQ0059	ZEBRA CONNECTOR	1	
19	RHQ0079-Y	SCREW	2	
101	BFL26NB1CT	MOTOR	1	
102	XQS14+A2FZ	SCREW	2	
103	RHW40002	WASHER	1	
104	RDV0037	CAPSTAN BELT(1)	1	
105	RDV0038	CAPSTAN BELT(2)	1	
106	RXQ0445-4	HEAD BLOCK ASS'Y	1	
106A	RXL0130	PINCH ROLLER ARM(F)	1	
106B	RME0187-1	HEAD ARM SPRING	1	
106C	RXL0131	PINCH ROLLER ARM(R)	1	
107	RFKRQSX75-S	MECHANISM BLOCK ASS'Y	1	
107A	RMQ0547	HOLD PIECE(F)	1	
107B	RHDI4047	SCREW	2	
107C	RMQ0548	HOLD PIECE(R)	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
A1	RQT4501-G	INSTRUCTION MANUAL	1	<IA>
A2	RP-BP61GY-S	RECHARGEABLE BATTERY	1	
A2-1	RFA0475-Q	R.BATTERY CARRYING CASE	1	
A3	RFA0617-H	DRY CELL BATTERY CASE	1	
A3-1	RKK0071-H	BATTERY COVER	1	
A6	RFEV316P-K1S	STEREO INSIDEPHONES	1	RQ-SX55V
A6	RFEV317P-KS	STEREO INSIDEPHONES	1	RQ-SX40V
A7	RFEV013P-KS	REMOTE CONTROLER	1	RQ-SX55V
⚠ A8	RP-BC155AGH	CHARGER	1	(GH)
⚠ A8	RP-BC155AGK	CHARGER	1	(GK)
⚠ A8	RP-BC155AEYB	CHARGER	1	(GCS)
A9	RQCB0169	SERVICENTER LIST	1	
A10※	RKB205ZA-0	EAR PADS	1	
C21	ECUV0J105ZFV	6.3V 1U	1	
C23	ECUV0J105ZFV	6.3V 1U	1	
C24	ECUE1H222KBQ	50V 2200P	1	
C25	ECUV0J105ZFV	6.3V 1U	1	
C27	ECUV1A224KBV	10V 0.22V	1	
C28	ECUV0J105ZFV	6.3V 1U	1	
C29	ECUV1C104KBV	16V 0.1U	1	
C30	RCSX0GY226RE	4V 22U	1	
C31	ECUE1C103KBQ	16V 0.01U	1	
C51	ECUE1C104ZFQ	16V 0.1U	1	
C52	ECUV1C104KBV	16V 0.1U	1	
C53	RCSX0GY226RE	4V 22U	1	
C54	RCSX0EY336RE	2.5V 33U	1	
C102	ECUE1H102KBQ	50V 1000P	1	
C103	ECUV1H391GCV	50V 390P	1	
C105	ECUE1C223KBQ	16V 0.022U	1	
C108	ECUV1H102KBV	50V 1000P	1	
C109	ECUE1H102KBQ	50V 1000P	1	
C110	ECUE1H020CCQ	50V 2P	1	
C111,12	ECUV1H680GCV	50V 68P	2	
C113	ECUV0J105ZFV	6.3V 1U	1	
C114	ECUE1H070DCQ	50V 7P	1	
C116	ECUE1C223KBQ	16V 0.022U	1	
C118	ECUE1H102KBQ	50V 1000P	1	
C123	ECUE1H102KBQ	50V 1000P	1	
C151	ECUV1C104KBV	16V 0.1U	1	
C153	RCST1EY474RE	25V 0.047U	1	
C155	ECUE1H102KBQ	50V 1000P	1	
C161	ECUV1C104KBV	16V 0.1U	1	
C162-64	ECUE1H221KBQ	50V 220P	3	
C201	ECUE1H103ZFQ	50V 0.01U	1	
C203	ECUE1C104ZFQ	16V 0.1U	1	
C205	ECUE1C153KBQ	16V 0.015U	1	
C206	RCUV1C333KBV	16V 33K	1	
C207	ECUV1H391GCV	50V 390P	1	
C208	ECUE1H330JCQ	50V 33P	1	
C210	ECUE1H150JCQ	50V 15P	1	
C211	ECUE1H221KBQ	50V 220P	1	
C212	ECUV0J105ZFV	6.3V 1U	1	
C213	ECUE1H221KBQ	50V 220P	1	
C215	RCST0GY475RG	4V 4.7U	1	
C216	RCST1CY225RG	16V 2.2U	1	
C217	ECUE1C223KBQ	16V 0.022U	1	
C218	ECUVNC104ZFV	16V 0.1U	1	
C219	ECUE1C103KBQ	16V 0.01U	1	
C220	ECUE1C104ZFQ	16V 0.1U	1	
C221	ECUE1H103ZFQ	50V 0.01U	1	
C222	ECUE1C103KBQ	16V 0.01U	1	
C223	ECUE1C223KBQ	16V 0.022U	1	
C224	ECUENJ683KBQ	63V 0.068U	1	
C225	ECUE1C223KBQ	16V 0.022U	1	
C226	ECUE1H680JCQ	50V 68P	1	
C227	ECUV0J105ZFV	6.3V 1U	1	
C228,29	ECUE1C153KBQ	16V 0.015U	2	
C230,31	ECUV1C683KBV	16V 0.068U	2	
C232	ECUENJ104KBQ	63V 0.1U	1	
C233	ECUV1H681KCN	50V 680P	1	
C234	ECUV0J105ZFV	6.3V 1U	1	
C235	ECUENJ104KBQ	63V 0.1U	1	
C236	ECUE1H331KBQ	50V 330P	1	
C237	RCST0GY475RG	4V 4.7U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C239	RCSX0GY106RF	4V 10U	1	
C240	ECUV1C223KBV	16V 0.022U	1	
C242	ECUE1H390JCQ	50V 39P	1	
C301	ECUE1C103KBQ	16V 0.01U	1	
C302	ECUVNC104ZFV	16V 0.1U	1	
C303	ECUE1H102KBQ	50V 1000P	1	
C304	ECUVNC104ZFV	16V 0.1U	1	
C307-11	ECUE1C103KBQ	16V 0.01U	5	
C312	ECUVNC104ZFV	16V 0.1U	1	
C313,14	ECUE1H050DCQ	50V 5P	2	
C316	ECUVNA105KBN	10V 1U	1	
C317	ECUE1C223KBQ	16V 0.022U	1	
C319,20	ECUE1E472KBQ	25V 4700P	2	
C326	ECST0EY336RR	2.5V 33U	1	
C360	ECUE1C223KBQ	16V 0.022U	1	
C362	ECUE1H102KBQ	50V 1000P	1	
C364	ECUVNC473KBV	16V 0.047U	1	
C365	RCSX0GY106RE	4V 10U	1	
C366	ECUV1A475ZFN	10V 4.7U	1	
C501-04	ECUE1H102KBQ	50V 1000P	4	
C506,07	RCSX0EY336RE	2.5V 33U	2	
C508	ECUE1C223KBQ	16V 0.022U	1	
C509	ECUE1H681KBQ	50V 680P	1	
C511	ECUVNC473KBV	16V 0.047U	1	
C512	RCST0GY156RG	4V 15U	1	
C513	ECUVNA225KBN	10V 2.2U	1	
C514	ECUE1E332KBQ	25V 3300P	1	
C515	ECUV0J105ZFV	6.3V 1U	1	
C516	ECUE1C103KBQ	16V 0.01U	1	
C517	ECUE1E332KBQ	25V 3300P	1	
C518	ECUV0J105ZFV	6.3V 1U	1	
C519	ECUE1C103KBQ	16V 0.01U	1	
C520,21	ECUVNC334ZFV	16V 0.33U	2	
C522	ECUE1C153KBQ	16V 0.015U	1	
C523	ECUE1H182KBQ	50V 1800P	1	
C524	ECUE1H681KBQ	50V 680P	1	
C525	ECUV1C104KBV	16V 0.1U	1	
C526	ECUE1H681KBQ	50V 680P	1	
C527	ECUE1H182KBQ	50V 1800P	1	
C528	ECUE1C153KBQ	16V 0.015U	1	
C529,30	ECUV0J105ZFV	6.3V 1U	2	
C531	RCST0EZ685RR	2.5V 6.8U	1	
C532	RCST0GA685RE	4V 6.8U	1	
C533	ECUV1A154KBV	10V 0.15U	1	
C534	RCST0GY685RG	4V 6.8U	1	
C535	ECUVNC473KBV	16V 0.047U	1	
C536	RCSX0GY220RE	4V 22U	1	
C537	RCST0JY106TG	6.3V 10U	1	
C538,39	ECUE1E392KBQ	25V 3900P	2	
C540	ECUV0J105ZFV	6.3V 1U	1	
C541	RCSX0EY336RE	2.5V 33U	1	
C542	ECUV1A475ZFN	10V 4.7U	1	
C543	ECUV0J105ZFV	6.3V 1U	1	
C544,45	ECUV1C104KBV	16V 0.1U	2	
C546,47	ECUV0J105ZFV	6.3V 1U	2	
C548	ECUE1H222KBQ	50V 2200P	1	
C550	ECUE1H102KBQ	50V 1000P	1	
C601	ECUV0J474KBV	6.3V 0.47U	1	
C602	ECUV1A224KBV	10V 0.22V	1	
C603	ECUV1C104KBV	16V 0.1U	1	
C604	RCST0GY475RG	4V 4.7U	1	
C605	ECUV1C104KBV	16V 0.1U	1	
C606-08	ECUE1C103KBQ	16V 0.01U	3	
C701	ECUE1H221KBQ	50V 220P	1	
C702,03	ECUE1H101KBQ	50V 100P	2	
C710	RCST0EX107RE	2.5V 100U	1	
C720	RCST0EX107RE	2.5V 100U	1	
CF101	RLFFECWN02AL	CERAMIC FILTER	1	
CF201	RLFECFM3450A	CERAMIC FILTER	1	
CF202	RLFFECWN02AL	CERAMIC FILTER	1	
CF203	RLFDFC02AL	CERAMIC FILTER	1	
CN1	RJSZA1606T1	CONNECTOR(6P)	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
CT101	RCVCFA20C02X	TRIMMER	1	
D21	MA729TX	DIODE	1	
D22	MA111TX	DIODE	1	
D23	MA8120MTX	DIODE	1	
D51	MA142WKTX	DIODE	1	
D52	MA729TX	DIODE	1	
D53	MA111TX	DIODE	1	
D101,02	RVDSVC203ATX	DIODE	2	
D201	SVC347S-TL	DIODE	1	
D501	SB00703QTL	DIODE	1	
D601	MA729TX	DIODE	1	
PJ01	CNB1002001AU	PHOTO COUPLER	1	
IC1	AN7208SA-E2	IC	1	
IC2	AN7233SH-E2V	IC	1	
IC3	UPD17934G509	IC	1	
IC5	AN7500FHQ-EB	IC	1	
IC6	MM1279XVBE	IC	1	
IC7	XC6518A1001VR	IC	1	
IC8	S29L130AFSTB	IC	1	
JK1	RJJ36TK03-1C	JACK,HEADPHONES	1	
L21	RLBN102V-Y	COIL,CHOKE	1	
L22	RL09U022T-M	COIL,DC-DC CONV.	1	
L23	RLBN182DV-Y	COIL,CHOKE	1	
L51	ELJSA680KF	COIL,CHOKE	1	
L101	RL04Z030T-M	COIL,CHOKE	1	
L103	RL04Z029T-M	COIL,CHOKE	1	
L201	RLV2N045-0	FERRITE ANTENNA	1	
L202	RL02U027T-M	COIL,AM OSC	1	
L701-06	RLBV601AV-Y	COIL,CHOKE	6	
LCD1	RSL5194-C	LCD DISPLAY	1	
P1	RPK1061	PACKING CASE	1	RQ-SX40V
P1	RPK1066	PACKING CASE	1	RQ-SX55V(S)
P1	RPK1067	PACKING CASE	1	RQ-SX55V(A)
P2	RPQ0575	PAD	1	
P3	RPQ0581-1	SPACER	1	
P4	RPF0127	PROTECTION BAG(UNIT)	1	
PCB1	REP2689A	MAIN PCB	1	(RTL)
Q21	2SB1295-6-TB	TRANSISTOR	1	
Q22	UN9214TX	TRANSISTOR	1	
Q23	2SB815B7TX	TRANSISTOR	1	
Q24	2SD1048X7TX	TRANSISTOR	1	
Q26	2SD2436STXRA	TRANSISTOR	1	
Q51	UNR911BJTX	TRANSISTOR	1	
Q52	UNR921BJTX	TRANSISTOR	1	
Q53	2SD2216RTX	TRANSISTOR	1	
Q55,56	UNR911BJTX	TRANSISTOR	2	
Q57	2SA1745-7-TL	TRANSISTOR	1	
Q58,59	2SD2216RTX	TRANSISTOR	2	
Q60	UNR921BJTX	TRANSISTOR	1	
Q61	UN9215TX	TRANSISTOR	1	
Q62	UNR921BJTX	TRANSISTOR	1	
Q101,02	2SC3935TX	TRANSISTOR	2	
Q103	2SB1295-6-TB	TRANSISTOR	1	
Q104	2SD2216RTX	TRANSISTOR	1	
Q105	2SA1745-7-TL	TRANSISTOR	1	
Q151	2SK1067-4-TL	TRANSISTOR	1	
Q152,53	2SD2216STX	TRANSISTOR	2	
Q201	2SK1067-4-TL	TRANSISTOR	1	
Q202	2SA1745-7-TL	TRANSISTOR	1	
Q203,04	2SC3931CTX	TRANSISTOR	2	
Q205	UN9116TX	TRANSISTOR	1	
Q206	UN9115TX	TRANSISTOR	1	
Q207	UN9110TX	TRANSISTOR	1	
Q208,09	2SB1462STX	TRANSISTOR	2	
Q210	2SB1295-6-TB	TRANSISTOR	1	
Q211	2SD2216RTX	TRANSISTOR	1	
Q212	2SA1774STL	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q213	2SD2216RTX	TRANSISTOR	1	
Q214,15	UN9210TX	TRANSISTOR	2	
Q301	2SD2216STX	TRANSISTOR	1	
Q302	DTA143ZETL	TRANSISTOR	1	
Q304	UNR921BJTX	TRANSISTOR	1	
Q305	2SB1295-6-TB	TRANSISTOR	1	
Q306	2SD2216RTX	TRANSISTOR	1	
Q307	2SB1295-6-TB	TRANSISTOR	1	
Q308	UN9110TX	TRANSISTOR	1	
Q309	DTC143ZETL	TRANSISTOR	1	
Q310	UNR921BJTX	TRANSISTOR	1	
Q311	2SB1462RTX	TRANSISTOR	1	
Q413	UN9210TX	TRANSISTOR	1	
Q501	UN9110TX	TRANSISTOR	1	
Q502,03	UN9215TX	TRANSISTOR	2	
Q504	UNR921BJTX	TRANSISTOR	1	
Q505	2SB1295-6-TB	TRANSISTOR	1	
Q506	UN9110TX	TRANSISTOR	1	
R21,22	ERJ2GEJ470X	1/4W 47	2	
R23	ERJ2GEJ681X	1/4W 680	1	
R25	ERJ2GEJ472X	1/4W 4.7K	1	
R50	ERJ2GEJ224X	1/4W 220K	1	
R51	ERJ3GEYJ3R3V	1/16W 3.3	1	
R53	ERJ2GEJ104X	1/4W 100K	1	
R55,56	ERJ2GEJ224X	1/4W 220K	2	
R57	ERJ3GEYD154V	1/16W 150K	1	
R58	ERJ3GEYD204V	1/16W 200K	1	
R59	ERJ2GEJ473X	1/4W 47K	1	
R60	ERJ2GEJ224X	1/4W 220K	1	
R61,62	ERJ2GEJ474X	1/4W 470K	2	
R103,04	ERJ2GEJ474X	1/4W 470K	2	
R109	EXB28V474JX	1/32W 470K×4	1	
R112	ERJ2GEJ220X	1/4W 22	1	
R114	ERJ2GEJ182X	1/4W 1.8K	1	
R115	ERJ2GEJ391X	1/4W 390	1	
R116,24	ERJ2GEJ473X	1/4W 47K	2	
R117	ERJ2GEJ152X	1/4W 1.5K	1	
R118	ERJ2GEJ223X	1/4W 22K	1	
R119	ERJ2GEJ151X	1/4W 150	1	
R123	ERJ2GEJ152X	1/4W 1.5K	1	
R151,52	ERJ2GEJ103X	1/4W 10K	2	
R153	ERJ2GEJ153X	1/4W 15K	1	
R154	ERJ2GEJ472X	1/4W 4.7K	1	
R201	ERJ2GEJ332X	1/4W 3.3K	1	
R202	ERJ2GEJ821X	1/4W 820	1	
R203	ERJ2GEJ101X	1/4W 100	1	
R204	ERJ2GEJ224X	1/4W 220K	1	
R205	ERJ2GEJ822X	1/4W 8.2K	1	
R206	ERJ2GEJ474X	1/4W 470K	1	
R207	ERJ2GEJ513X	1/4W 51K	1	
R208	ERJ2GEJ221X	1/4W 220	1	
R209	ERJ2GEJ332X	1/4W 3.3K	1	
R210,19	ERJ2GEJ153X	1/4W 15K	2	
R211	ERJ2GEJ333X	1/4W 33K	1	
R212	ERJ2GEJ472X	1/4W 4.7K	1	
R213	ERJ2GEJ152X	1/4W 1.5K	1	
R214	ERJ2GEJ181X	1/4W 180	1	
R215	ERJ2GEJ682X	1/4W 6.8K	1	
R216,17	ERJ2GEJ512X	1/4W 5.1K	2	
R218	ERJ2GEJ102X	1/4W 1K	1	
R220	ERJ2GEJ332X	1/4W 3.3K	1	
R221	ERJ2GEJ103X	1/4W 10K	1	
R222	ERJ2GEJ221X	1/4W 220	1	
R223	ERJ2GEJ152X	1/4W 1.5K	1	
R224	ERJ2GEJ104X	1/4W 100K	1	
R225,26	ERJ2GEJ273X	1/4W 27K	2	
R227	ERJ2GEJ473X	1/4W 47K	1	
R228	ERJ2GEJ333X	1/4W 33K	1	
R229	ERJ2GEJ153X	1/4W 15K	1	
R230	ERJ3GEYD153V	1/16W 15K	1	
R231	ERJ3GEYD223V	1/16W 22K	1	
R232	ERJ2GEJ823X	1/4W 82K	1	
R301,02	ERJ2GEJ474X	1/4W 470K	2	
R303	ERJ2GEJ471X	1/4W 470	1	

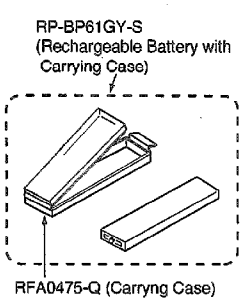
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R304	ERJ2GEJ474X	1/4W 470K	1	
R306,07	ERJ3GEYJ106V	1/16W 10M	2	
R308	ERJ2GEJ224X	1/4W 220K	1	
R309	ERJ3GEYD104V	1/16W 100K	1	
R310	ERJ3GEYD224V	1/16W 220K	1	
R313	ERJ3GEYD333V	1/16W 33K	1	
R314	ERJ2GEJ473X	1/4W 47K	1	
R315	ERJ2GEJ153X	1/4W 15K	1	
R316	ERJ3GEYD104V	1/16W 100K	1	
R318	EXB28V474JX	1/32W 470K×4	1	
R320	EXB28V474JX	1/32W 470K×4	1	
R321	ERJ2GEJ470X	1/4W 47	1	
R322,23	ERJ2GEJ682X	1/4W 6.8K	2	
R324	ERJ2GEJ821X	1/4W 820	1	
R325,26	ERJ3GEYJ472V	1/16W 4.7K	2	
R327	ERJ3GEYJ562V	1/16W 5.6K	1	
R328,29	ERJ3GEYD333V	1/16W 33K	2	
R332	ERJ2GEJ753X	1/4W 75K	1	
R333	ERJ2GEJ513X	1/4W 51K	1	
R334	ERJ2GEJ333X	1/4W 33K	1	
R335	ERJ2GEJ243X	1/4W 24K	1	
R337	ERJ2GEJ103X	1/4W 10K	1	
R338	ERJ2GEJ153X	1/4W 15K	1	
R339	ERJ2GEJ152X	1/4W 1.5K	1	
R343	ERJ2GEJ224X	1/4W 220K	1	
R344	ERJ2GEJ102X	1/4W 1K	1	
R345	ERJ2GEJ274X	1/4W 270K	1	
R346	ERJ2GEJ101X	1/4W 100	1	
R347	ERJ2GEJ104X	1/4W 100K	1	
R349	ERJ2GEJ153X	1/4W 15K	1	
R350	ERJ2GEJ563X	1/4W 56K	1	
R351	ERJ3GEYJ184V	1/16W 180K	1	
R362	ERJ2GEJ102X	1/4W 1K	1	
R370,71	ERJ2GEJ561X	1/4W 560	2	
R503	ERJ2GEJ153X	1/4W 15K	1	
R504	ERJ2GEJ682X	1/4W 6.8K	1	
R505,06	ERJ2GEJ151X	1/4W 150	2	
R507	ERJ2GEJ682X	1/4W 6.8K	1	
R508	ERJ2GEJ153X	1/4W 15K	1	
R509	ERJ2GEJ103X	1/4W 10K	1	
R510	ERJ2GEJ822X	1/4W 8.2K	1	
R511,13	ERJ2GEJ182X	1/4W 1.8K	2	
R512	ERJ2GEJ163X	1/4W 16K	1	
R514	ERJ2GEJ153X	1/4W 15K	1	
R515,16	ERJ2GEJ394X	1/4W 390K	2	
R519,20	ERJ2GEJ183X	1/4W 18K	2	
R521	ERJ2GEJ473X	1/4W 47K	1	
R522,23	ERJ3GEYJ2R2V	1/16W 2.2	2	
R524	ERJ2GEJ103X	1/4W 10K	1	
R601	EXB28V154JX	1/32W 150K×4	1	
R603	ERJ2GEJ101X	1/4W 100	1	
R604	ERJ2GEJ123X	1/4W 12K	1	
R605	ERA52TJ512V	1/4W 5.1K	1	
R606	ERJ2GEJ472X	1/4W 4.7K	1	
R607	ERJ2GEJ123X	1/4W 12K	1	
R701	ERJ6GEYJ2R2V	1/10W 2.2	1	
RJ302	ERJ3GEY0R00V	CHIP JUMPER	1	
S13	RSH1B011-1U	SW,TAPE DET	1	
S301	RSS2A012-1A	SW,MECHANISM DET	1	
S303	RSS2A010-1A	SW,HOLD	1	
S312-19	EVQPLMA15	SW,PUSH	8	
SA1	QZZCWAT	TEST TAPE,TAPE SPEED ADJ.	1	
VR1	EVUT0VA05A54	VR,VOLUME	1	
VR3	EVM1SSX50B14	VR,FM STEREO ADJ.	1	
VR601	EVM1CSX10B14	VR,TAPE SPEED ADJ.	1	
X301	RSXC75K0L02T	OSCILLATOR	1	
Z1	RXACBPWB1GTR	COMPONENT COMBINATION	1	

Supply of Rechargeable Battery as Replacement Parts

Please take note of the following points relating to Carrying Case to be used for protection of Rechargeable Battery from shorting.

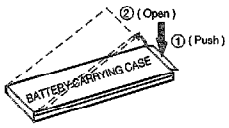
Replacement Parts:

- Rechargeable Battery (RP-BP61GY-S) to be supplied will be provided with Carrying Case (RFA0475-Q).
- No replacement parts will be supplied for Rechargeable Battery without Carrying Case.
- Replacement parts will be supplied for Carrying Case (RFA0475-Q) without Rechargeable Battery.
- To your customers, delivery Rechargeable Battery together with Carrying Case to prevent shorting accidents that may occur when Rechargeable Battery is carried about without Carrying Case.

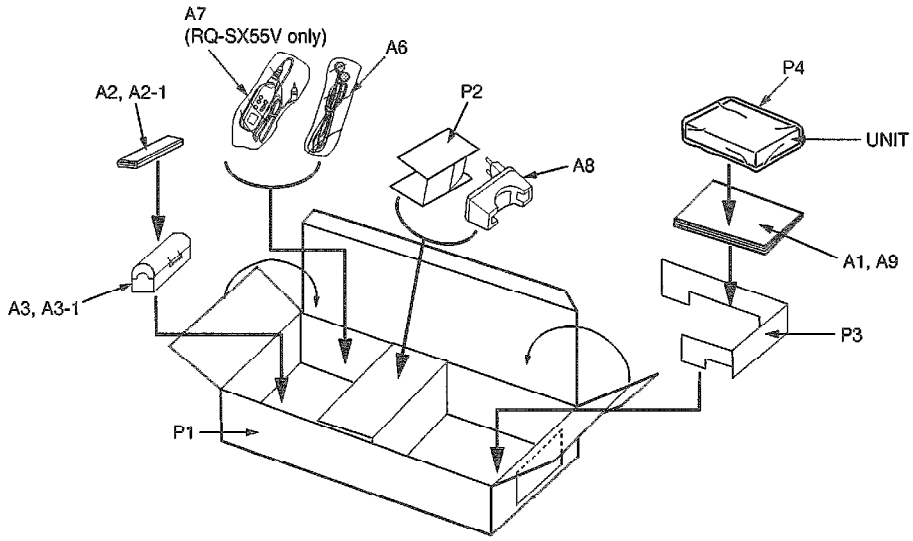


Caution in Use of Rechargeable Battery

- Take Rechargeable Battery out of Carrying Case and use it.
- Be sure to carry Rechargeable Battery in this Carrying Case. If not, it may either heat or ignite by shorting with a metal.



Packaging



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